



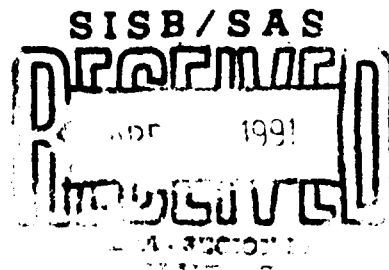
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C-586-4-1-128

April 25, 1991

Mr. A.R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365



Subject: Photo Chemical Systems
Knightdale, Wake County, North Carolina
Environmental Priorities Initiative/Modified Preliminary Assessment
Final Report - Revision 0
EPA ID No. NCD000831065
TDD No. F4-8910-29

Dear Mr. Hanke:

Please find enclosed two copies of the subject report.

All EPA comments have been addressed and incorporated into the report. If you have any questions or comments, please contact me.

Very truly yours,

Approved:

A handwritten signature in cursive script, reading "Jerald Tittle".
Jerald Tittle
Project Manager

A handwritten signature in cursive script, reading "Greg Schank".

Greg Schank

JT/kat

Enclosures (2)

FINAL

ENVIRONMENTAL PRIORITIES INITIATIVE
PRELIMINARY ASSESSMENT OF
PHOTO CHEMICAL SYSTEMS
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
EPA ID #NCD000831065

Prepared Under
TDD No. F4-8910-29
CONTRACT No. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

APRIL 24, 1991

NUS CORPORATION
SUPERFUND DIVISION

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
1.1 Objective	1
1.2 Scope of Work	1
2.0 SITE DESCRIPTION	2
2.1 Site Location	2
2.2 Site Features	2
2.3 Ownership History	2
2.4 Nature of Operations	2
2.5 Permit and Regulatory History	5
3.0 ENVIRONMENTAL SETTING	6
3.1 Water Supply	6
3.2 Surface Water	6
3.3 Climatological, Meteorological, and Hydrogeological Factors	6
3.4 Critical Habitats and Endangered Species	7
4.0 VISUAL SITE INSPECTION (VSI)	8
4.1 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)	8
4.2 VSI Participants	8
REFERENCES	24
APPENDIX A Topographic Map	
APPENDIX B Preliminary Assessment Form	

TABLES

Table 1	Solid Waste Management Units (SWMU) and Areas of Concern (AOC) Identification Summary	10
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FIGURES

Figure 1	Site Location Map	3
Figure 2	Solid Waste Management Units, Areas of Concern, and Photograph Locations	4

EXECUTIVE SUMMARY

Photo Chemical Systems is located on Forest Drive, one block north of U.S. Highway 64, near the town of Knightdale, North Carolina. The 1-acre facility consists of one warehouse with office space. Photo Chemical Systems began operations at this facility during 1985 and continues at the present time. Photo Chemical Systems blends chemicals for the electronic and printing industry.

On November 17, 1980, Photo Chemical Systems filed a RCRA Part A Hazardous Waste Permit application as a storage facility. After a formal request to submit a Part B Hazardous Waste Permit application Photo Chemical Systems requested to have its Part A withdrawn due to insurance requirements. Photo Chemical Systems operated as a generator at its former location in Wendell, North Carolina; currently it is operating as a small-quantity generator.

Photo Chemical Systems has operated from locations in Wendell and Knightdale, North Carolina. Confusion has occurred because Photo Chemical Systems was allowed to maintain its original EPA ID number after moving to the latter location.

The majority of the population within 3 miles of the facility is served by private wells. The city of Knightdale serves approximately 350 connections with water obtained from three wells located between 1 and 2 miles southwest of the facility. The city of Knightdale also serves approximately 650 connections with surface water purchased from the city of Raleigh. A house count indicates approximately 1,392 residences within 3 miles of the facility not served by municipal water. The estimated population served by groundwater within 3 miles of the facility is 5,290.

Surface water runoff from the facility enters an unnamed tributary of Beaverdam Creek which then flows into the Neuse River approximately 3 miles to the west. The Neuse River is used for recreational fishing. No critical habitats were identified along the surface water pathway for a distance of 15 miles.

The Visual Site Inspection (VSI) conducted during the investigation identified five Solid Waste Management Units (SWMUs) and two Areas of Concern (AOCs). Two SWMUs and two AOCs are recommended for further action.

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) conducted a Preliminary Assessment (PA) and a Visual Site Inspection (VSI) at Photo Chemical Systems on March 26, 1990. The task was performed as a part of the Environmental Priorities Initiative (EPI) program as stated in Technical Directive Document (TDD) No. F4-8910-29.

1.1 OBJECTIVE

The major objective of the EPI program is to conduct an onsite and offsite inspection of the assigned facility in order to characterize the Solid Waste Management Units (SWMUs), associated releases, and other Areas of Concern (AOCs). The inspection is conducted in a two-phase operation; the Preliminary Review, which includes the review and evaluation of specific file documents; and the VSI, which identifies all SWMUs, known releases, and AOCs.

1.2 SCOPE OF WORK

The scope of this investigation included the following activities:

- A search of state and EPA files in an attempt to obtain and review specific documents (RCRA, CERCLA, AIR, and NPDES) that will help characterize the facility.
- Development of a detailed facility, base map showing site features, SWMU locations, AOCs, and photo-documentation areas.
- Evaluation of target populations within a 3-mile radius from the site with regard to groundwater and air, and within a 15-mile stream distance for surface water.
- A private well survey within a 3-mile radius of the facility.
- Inspection and photo-documentation of all SWMUs and related releases and exposure pathways.
- Inspection and photo-documentation of all AOCs.

2.0 SITE DESCRIPTION

2.1 SITE LOCATION

Photo Chemical Systems is located in eastern Wake County one block north of U.S. Highway 64, approximately 15 miles east of Raleigh, North Carolina, near the town of Knightdale, North Carolina. The address is 105 Knightdale Drive, Knightdale, North Carolina. The coordinates of the plant building are latitude: 35° 48' 00" N and longitude: 78° 28' 42" W (Appendix A, Figure 1) (Ref. 1).

2.2 SITE FEATURES

The facility is located on approximately 1 acre of land. The plant occupies approximately one-eighth of the property and allows unrestricted access because it is unfenced. The facility consists of one building which is divided into an office area and warehouse/chemical mixing area (Figure 2) (Ref. 1).

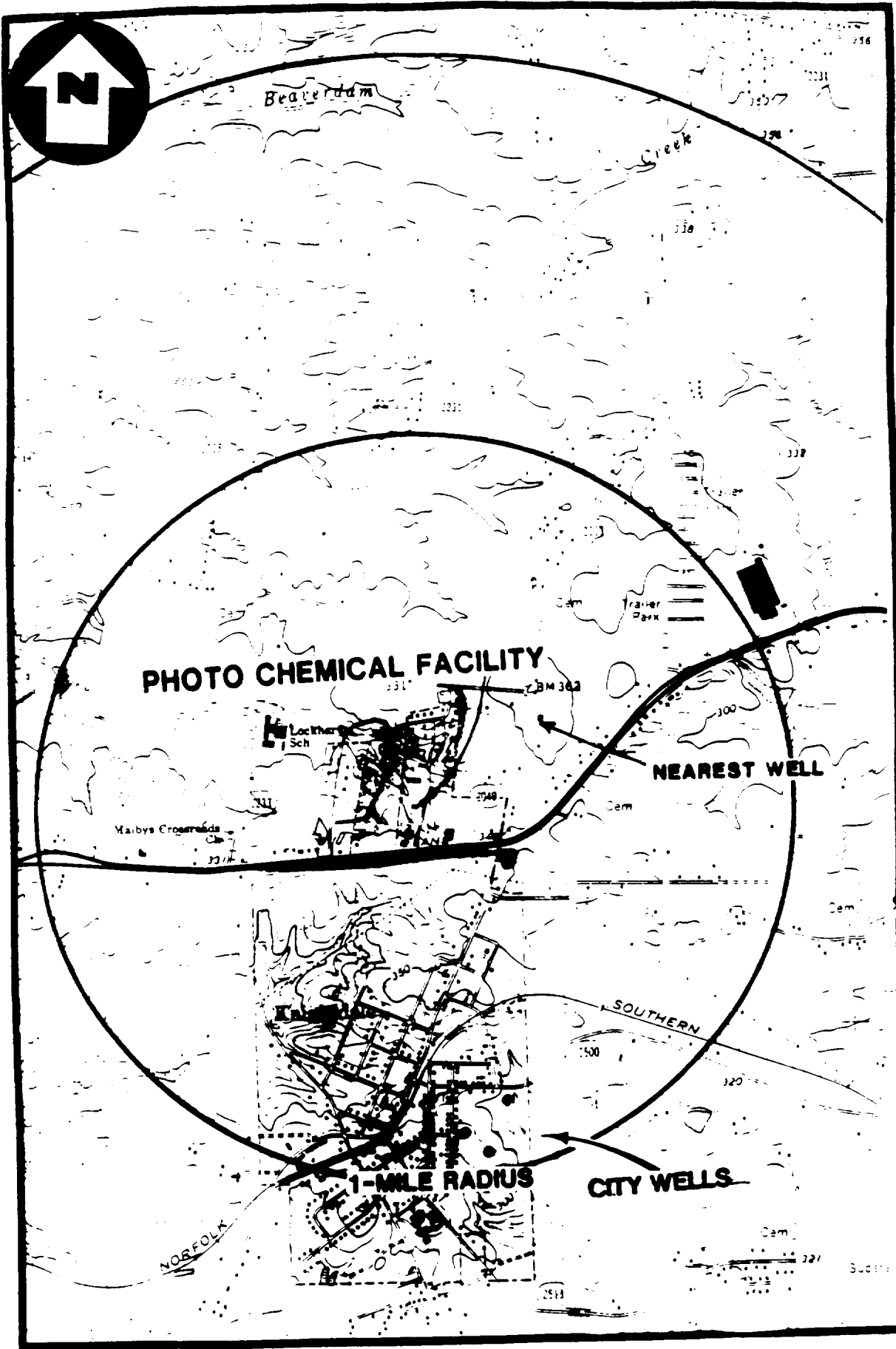
2.3 OWNERSHIP HISTORY

Photo Chemical Systems is owned by Jeff Dykes of 900 Sun Valley Drive, Roswell, Georgia 30076 (Ref. 2).

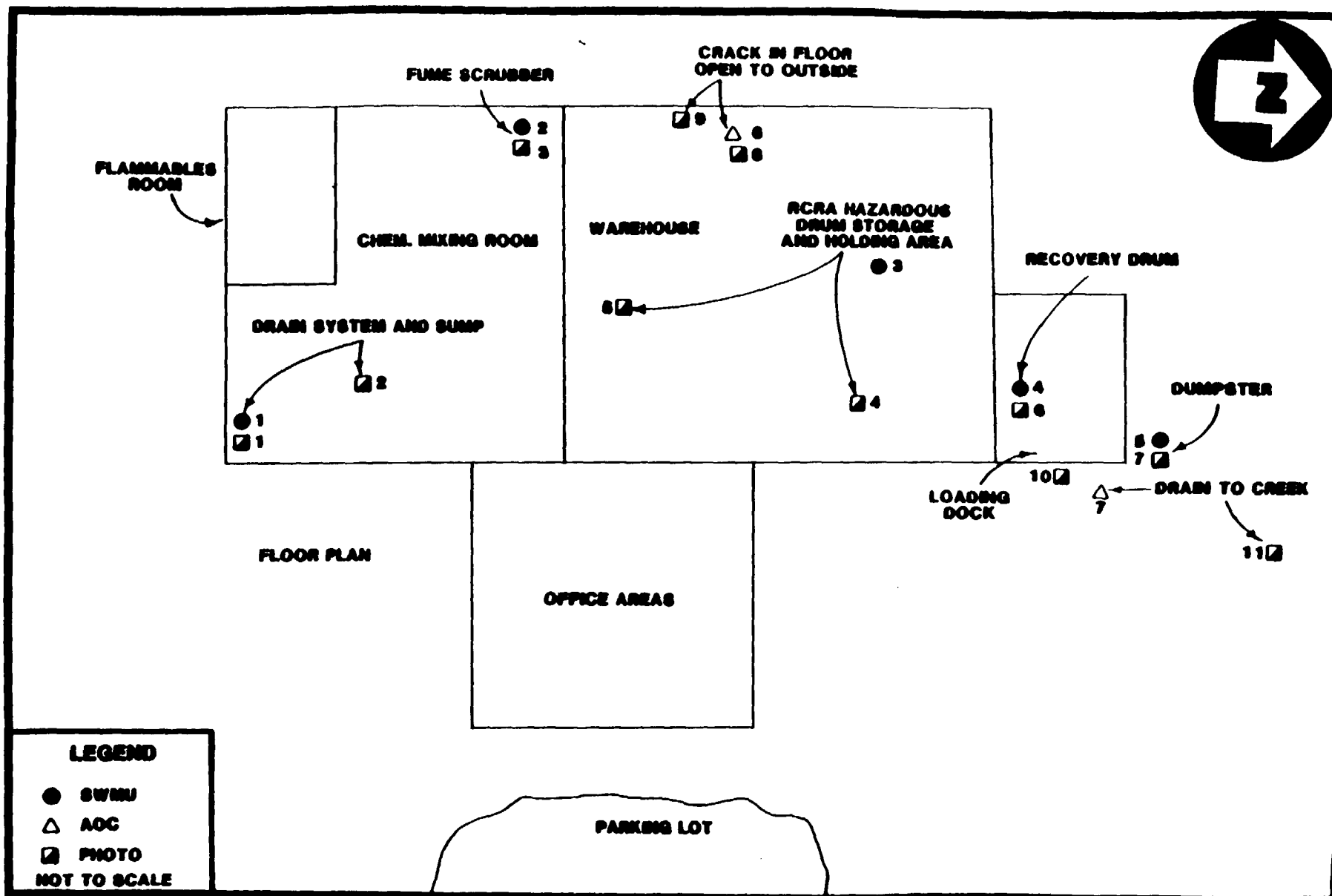
2.4 NATURE OF OPERATIONS

Photo Chemical Systems in Knightdale, North Carolina, has been operating since 1985. Former operations were conducted in Wendell, North Carolina (Ref. 2). Much of the file material relates to the Wendall location during the period of 1976 to 1985. The facility under investigation is currently operating under the original EPA identification number NCD000831065 assigned to the Wendell facility (Refs. 3, 4).

The majority (95%) of Photo Chemical Systems' operations consist of wholesaling drummed commercial chemicals. The remaining 5 percent of business consists of mixing and blending the chemical products prior to sale. As a service to its' customers, Photo Chemical Systems acts as a staging area for spent liquid chemicals. Fifty, 5-gallon drums of various chemicals are stored for less than 90 days prior to shipping to waste reclaimers (Ref. 5).



**SITE LOCATION MAP (from file material)
 PHOTO CHEMICAL SYSTEMS
 KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA**



**SOLID WASTE MANAGEMENT UNITS, AREA OF CONCERN
AND PHOTOGRAPH LOCATIONS
PHOTO CHEMICAL
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA**

2.5 PERMIT AND REGULATORY HISTORY

Photo Chemical Systems filed a RCRA Part A Hazardous Waste Permit Application as a storage facility on November 17, 1980 (Ref. 2). This application was filed while Photo Chemical Systems was located at E. Wilson Road in Wendell, North Carolina, approximately 10 miles east of its current location in Knightdale, North Carolina. Photo Chemical Systems then filed for an address change (Ref. 6). On December 5, 1985, the Waste Engineering Section of the EPA granted Photo Chemical Systems retention of its original identification number, even though they had moved several miles to a new location (Ref. 3). A uniform Hazardous Waste Manifest indicates that Photo Chemical Systems is currently using EPA ID Number NCD000831065 (Ref. 4). After a request by the state of North Carolina, Photo Chemical Systems indicated that a Part B application would not be filed (Ref. 7). Photo Chemical Systems requested withdrawal of the Part A (interim status) on August 27, 1987 (Ref. 8). On September 15, 1987, Photo Chemical Systems was granted a requested change in classification to a small-quantity generator (Ref. 9).

During a RCRA generator inspection conducted by the North Carolina Department of Human Resources on May 5, 1989, the Photo Chemical Systems' facility was found to be in compliance with all applicable regulations (Ref. 10). The status of its transportation permit, however, is unknown. Photo Chemical Systems transportation permit expired on October 25, 1987, and has not been reapplied for since March 1989 (Ref. 11). An investigation report submitted by the New Jersey Department of Environmental Protection to the state of North Carolina on February 11, 1986, indicated that Photo Chemical Systems was in violation of state transporter regulations (Ref. 12).

3.0 ENVIRONMENTAL SETTING

The Environmental Setting Section, in addition to the Topographic Map (Appendix A) and Preliminary Assessment Form (Appendix B), provide information to evaluate the potential for a release to groundwater and surface water resources and other receptors.

3.1 WATER SUPPLY

The majority of the population within 3 miles of Photo Chemical Systems is served by private wells (Ref. 13). The city of Knightdale water system provides service to about 1,000 connections using two distribution systems. One system serves within the city limits of Knightdale. Approximately 350 connections are serviced by water from three wells. The other system receives surface water purchased from the city of Raleigh and serves several new subdivisions along Highway 64; this system also sells water to the city of Wendell (Appendix A). A house count using topographic maps identified approximately 1,392 residences using private wells within the 3-mile radius. Between the 3- and 4-mile radii, approximately 986 households are served by private wells. The estimated population using private wells within 3 miles of the facility is, therefore, 5,290 (1,392 private wells x 3.8 people/household) (Appendix A) (Refs. 14, p. 11).

3.2 SURFACE WATER

Surface water runoff from the facility flows approximately 50 feet before entering an unnamed tributary of Beaverdam Creek. This tributary flows for approximately 1.5 miles northwest before entering Beaverdam Creek. Beaverdam Creek enters the Neuse River after 2.0 miles and then flows southeast for the remainder of the 15-mile, migration pathway (Appendix A). There are no permitted surface water intakes located along the surface water migration route (Ref. 15). The Neuse River is fished by recreational fishermen for sunfish, channel catfish, and largemouth bass (Ref. 16).

3.3 CLIMATOLOGICAL, METEOROLOGICAL, AND HYDROGEOLOGICAL FACTORS

The site lies in eastern Wake County and overlies an extensive granitic intrusion of adamellite. The adamellite is characterized as medium-grained, massive, gray, granitic rock, and maps indicate numerous diabase dikes intruding into the adamellite body. Cuttings from boreholes done on the nearby Square D Company site show weathered granitic material beginning between 4 and 10 feet below the surface, overlain by coarse, sandy materials. The soil series on the site is

Wedowee-Durham-Louisburg, which is typically firm, clayey soils on felsic rocks, such as granite or Carolina slates. The upper subsurface beneath the site consists of residual soil grading downward into saprolite and then into the unweathered adamellite. Solid bedrock, the unweathered adamellite, lies about 10 to 60 feet below the surface (Ref. 17, p. 4).

The saturated portion of the regolith and the water within fractures of the crystalline rocks are hydraulically connected and together comprise the regolith/crystalline rock aquifer. The regolith/crystalline rock aquifer is the aquifer of concern in the Raleigh, North Carolina, area. It is an unconfined (water-table) aquifer. Recharge to the aquifer results from the infiltration of rainfall through the unsaturated portion of the regolith to the saturated portion of the regolith and fractures in the crystalline rocks. Water in the fractures rarely exceeds a depth of 300 to 400 feet below land surface (Refs. 18, pp. 1-11; 19, p. 330). The hydraulic conductivity in the overlying soils ranges from 1×10^{-2} to 1×10^{-5} cm/sec (Ref. 17, p. 5). Depth to groundwater roughly reflects the topographic relief of the land surface. In the vicinity of Photo Chemical Systems, this depth is approximately 50 feet (Appendix A).

The climate in the Wake County, North Carolina, area is warm, moist, and temperate. The net annual temperature generally ranges from 51° to 70° F (Ref. 20, p. 1). The average annual rainfall is 44 inches, and the net precipitation in the Raleigh area is approximately 3 inches (Ref. 21, pp. 43, 63). The 1-year, 24-hour rainfall is 3.5 inches (Ref. 22, p. 93).

3.4 CRITICAL HABITATS AND ENDANGERED SPECIES

No critical habitats were identified along the surface water pathway for a distance of 15 miles. There are, however, federally endangered, as well as threatened species found in this part of the state (Ref. 23)

4.0 VISUAL SITE INSPECTION (VSI)

The VSI of the Photo Chemical Systems' facility was performed on March 26, 1990 (Ref. 1). The VSI focused on the past and present waste streams at the facility in order to identify all Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) and to collect information beneficial in assessing potential to release hazardous waste or constituents to the environment.

4.1 SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs)

Five SWMUs were identified at the Photo Chemical Systems' facility during the VSI. Additionally, two AOCs were identified. SWMUs identified include the drain system and sump, the fume scrubber, the RCRA-regulated hazardous drum storage area, a recovery drum, and a dumpster. The AOCs identified include a crack in the floor and a drain to the creek.

During the VSI, personnel representing Photo Chemical Systems accompanied the NUS Field Investigation team members. The VSI was conducted in a fashion that attempted to follow the same route in which wastes are handled at the facility (Ref. 1).

All SWMUs and AOCs are delineated on Table 1, are located on Figure 2, and further discussed in this section. Photographs were taken of all SWMUs and AOCs and are keyed to the photograph locations on Figure 2. Photographs with documentation follow this section.

The weather conditions at the facility during the VSI were sunny with temperatures around 60° F. Ground conditions during the VSI were dry (Ref. 1).

4.2 VSI PARTICIPANTS

The following people were present during the VSI:

Jerald Tittle	Preston Averette
NUS Corporation	Plant Manager
Project Manager	Photo Chemical Systems
Environmental Scientist	

Bob Rose
NUS Corporation
Environmental Scientist

Danny Griswell
Warehouse Manager
Photo Chemical Systems

TABLE 1

**SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) IDENTIFICATION SUMMARY
PHOTO CHEMICAL SYSTEMS
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA**

SWMU Number	Name of Unit	Years of Operation	Waste Managed	Evidence of Release	Recommendation		
					No Further Action	Further Assessment	Sampling
1 (SWMU)	Drain System and Sump	5	Ferric chloride	Yes		A	
2 (SWMU)	Fume Scrubber	5	Ferric chloride, sodium hydroxide	None	X		
3 (SWMU)	RCRA Hazardous Drum Storage/Holding Area	5	D008 and D010	None	X		
4 (SWMU)	Recovery Drum	5	Fluoroboric acid	None		B	
5 (SWMU)	Dumpster	5	Office waste and nonputrescible materials	None	X		
6 (AOC)	Crack in Floor	5	Any materials stored in warehouse; NaOH was stored adjacent to area	None		C	
7 (AOC)	Drain to Creek	3	Mostly drains rainwater	None	X		

A - Seal crack around lip of floor sump and install an overflow warning system

B - Drum should be stored in area designed to contain any further spillage

C - Repair concrete floor, construct berm around storage area

SWMU NUMBER: 1

SWMU NAME: Drain System and Sump

SWMU DESCRIPTION: This unit consists of eight floor drains. These drains are located as follows: six in the chemical mixing room and one each in the flammables room and warehouse. Each of these leads to a central, 45-gallon, polyvinyl chloride drum sunk into the concrete floor of the southeast corner of the chemical mixing room. Any liquids entering the drum are pumped upward into a 250-gallon, holding tank. This tank is approximately 2 feet above the floor. Liquids are pH-neutralized and discharged to the municipal sewer system from the holding tank (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Ferric chloride was the chemical most often mixed or blended in this area.

RELEASE CONTROLS: The chemical mixing room is curbed by a 6-inch, concrete berm. No overflow indicators were installed at the time of the VSI.

RELEASE HISTORY: There is no record or documentation of any environmental impact on or off site from materials disposed of in this unit. However, cracks in the floor are visible. Ferric chloride has stained the area around sump (Ref. 1).

INTERIM

RECOMMENDATIONS: Seal cracks in concrete floor where the drum and the concrete meet. Install overflow alarms on both containers.

PHOTOGRAPH NOS.: 1A, 1B

SWMU NUMBER: 2

SWMU NAME: Fume Scrubber

SWMU DESCRIPTION: This unit consists of fume collection hoods, piping, and a fume scrubber. The hoods are located above each of the three blending tanks used by Photo Chemical Systems. These tanks are located along the north wall of the chemical mixing room. Fumes from blending tanks are vented via polyvinyl chloride piping into the scrubber which is in the northwest corner of the chemical mixing room. Fumes are circulated through a water bath to be absorbed. This water is neutralized and discharged into the municipal sewer system. No filters are used on this unit. Manual controls are necessary for operation (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Waste managed includes fumes from process chemicals. Ferric chloride and sodium hydroxide are most often used in the blending tanks under the hoods.

RELEASE CONTROLS: The only method of control was via a manually operated electrical switch.

RELEASE HISTORY: There are no records or documentation of any environmental impact on or off site from materials disposed of in this unit (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NO.: 2

SWMU NUMBER: 3

SWMU NAME: RCRA Hazardous Drum Storage and Holding Area

SWMU DESCRIPTION: This unit consists of a hazardous waste holding area. A total of forty-four, 55-gallon drums were present during the Visual Site Inspection (VSI). These drums were located in the warehouse. Drums were properly labeled and stacked. Forty-two drums contained spent ammonial etch, labeled D008 (lead), and two were labeled D010 (selenium). Drums were awaiting shipment to C.P. Chemical of Sumter, South Carolina (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit was placed into service in 1990.

DATE OF CLOSURE: The unit was active during the VSI.

WASTES MANAGED: Waste liquids stored in this unit include RCRA-regulated D008 and D010 (Ref. 1).

RELEASE CONTROLS: No release controls were observed near the area of drum storage. The area was a warehouse with a flat, concrete floor.

RELEASE HISTORY: According to Photo Chemical Systems' personnel, there have been no releases from this unit (Ref. 1, p. 10). During the VSI no leaks or releases were observed (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NOS.: 3A, 3B

SWMU NUMBER: 4

SWMU NAME: Recovery Drum

SWMU DESCRIPTION: This unit consists of a steel, 70-gallon, recovery drum containing a clay absorbent material located at the entrance from the loading dock area. This material was placed into service to contain an accidental spillage of approximately 2 quarts of fluroboric acid.

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit was placed into service on March 5, 1990.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Fluroboric acid was currently being managed.

RELEASE CONTROLS: Absorbent materials are used to contain accidental spillage. The absorbents are then shipped to C.P. Chemical Reclaimers of South Carolina. There were no observed release controls. These drums are placed into service as emergency release controls.

RELEASE HISTORY: According to Photo Chemical Systems' personnel, an accidental release of approximately 2 quarts of fluroboric acid occurred on March 5, 1990 (Ref. 1).

INTERIM

RECOMMENDATIONS Drums should be stored in an area of proper design to contain any accidental spillage.

PHOTOGRAPH NO.: 4

SWMU NUMBER: 5

SWMU NAME: Dumpster

SWMU DESCRIPTION: The 10-cubic-yard, metal dumpster has two doors on top that may be opened to receive materials. This unit is located near the loading docks at the north side of the building and is placed on a gravel pad. The unit is removed weekly by BFI and taken to the county landfill (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: The unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: This unit is used to store office waste and other nonputrescible materials.

RELEASE CONTROLS: This unit has lids which would prevent rainwater and animals from entering.

RELEASE HISTORY: According to Photo Chemical Systems' personnel there have been no on or offsite releases from this unit. During the VSI there was no evidence of a release from this unit (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NO.: 5

AOC NUMBER: 6

AOC NAME: Crack in Floor - Open to Outside

AOC

DESCRIPTION: This area consists of a hole in the concrete floor approximately 2 x 2 inches, under the west wall of the warehouse, which was apparently caused by settling of the building. This hole is approximately 30 feet from the northwest corner and 10 feet from a drum of sodium hydroxide which shows signs of leakage (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this Area of Concern (AOC) is believed to have been placed into service in approximately 1985.

DATE OF CLOSURE: This AOC was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Sodium hydroxide was stored adjacent to area.

RELEASE CONTROLS: No release controls were observed during the VSI, and substances entering these cracks may reach the outside environment.

RELEASE HISTORY: Photo Chemical Systems' personnel have no record of any release from this area.

INTERIM

RECOMMENDATIONS: The hole in the floor should be repaired and a berm constructed which would enclose the entire chemical storage area.

PHOTOGRAPH NOS.: 6A, 6B

AOC NUMBER: 7

AOC NAME: Drain to Creek

AOC

DESCRIPTION: The Area of Concern (AOC) consists of a 3-inch, PVC pipe that drains the truck-ramp area during storms. The drain flows underground approximately 50 feet where it enters an unnamed tributary of Beaverdam Creek. The truck ramp is constructed of concrete block retaining walls with a concrete deck. The total volume is approximately 24' x 20' x 16" (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this AOC is believed to have been placed into service in January 1987.

DATE OF CLOSURE: This AOC was active during the Visual Site Inspection.

WASTES MANAGED: This AOC normally routes rainwater away from the facility; however, any accidental spillage around the loading dock may enter this pipe.

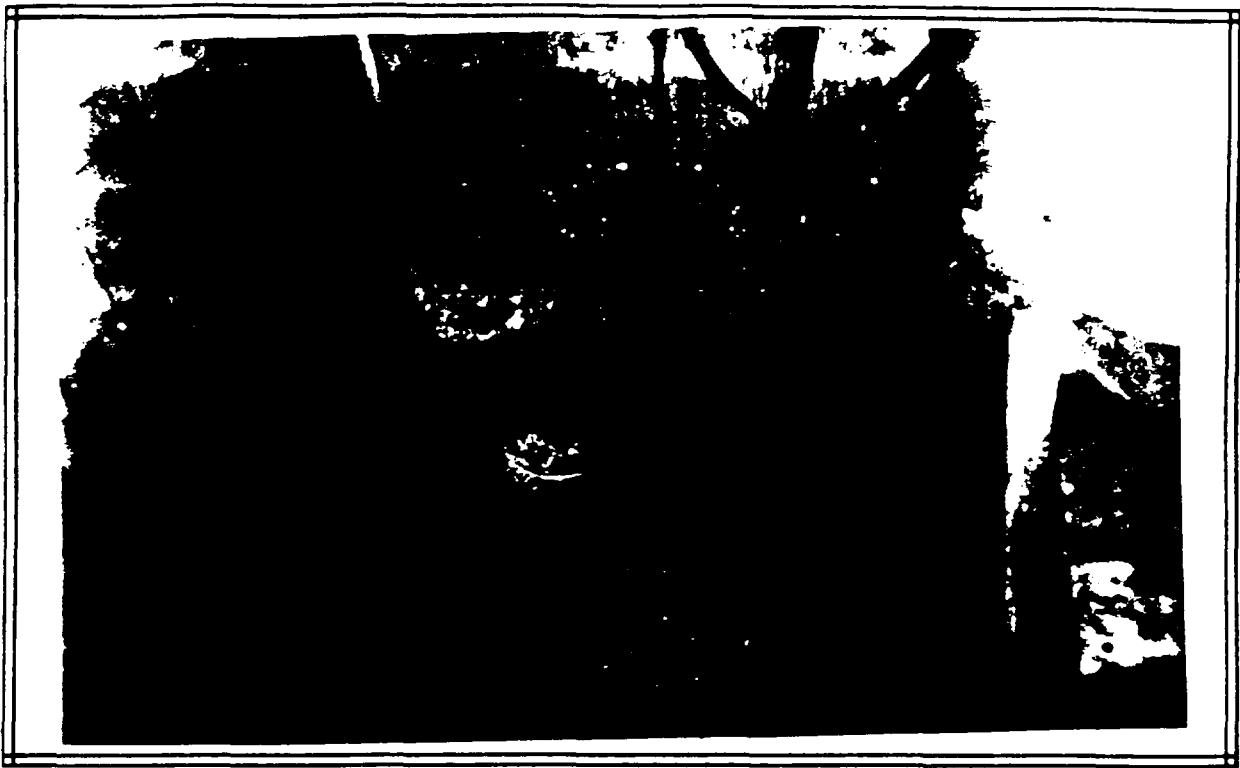
RELEASE CONTROLS: Normal operations required the manual opening or closing via a cap-like plug.

RELEASE HISTORY: There was no history of a release. Rainwater or other liquids drain off site via associated pipes.

INTERIM

RECOMMENDATIONS: No Further Action.

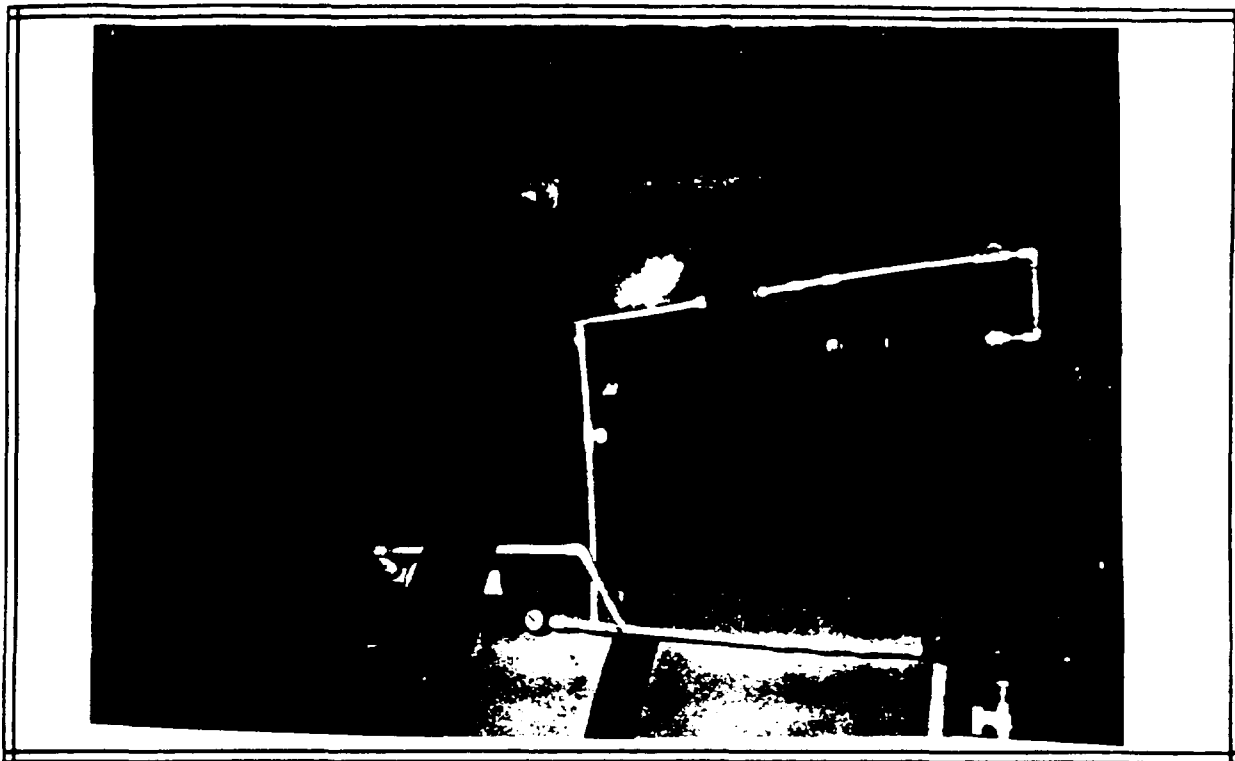
PHOTOGRAPH NO.: 7



SWMU No. 1, Photo 1, Drain System and Sump



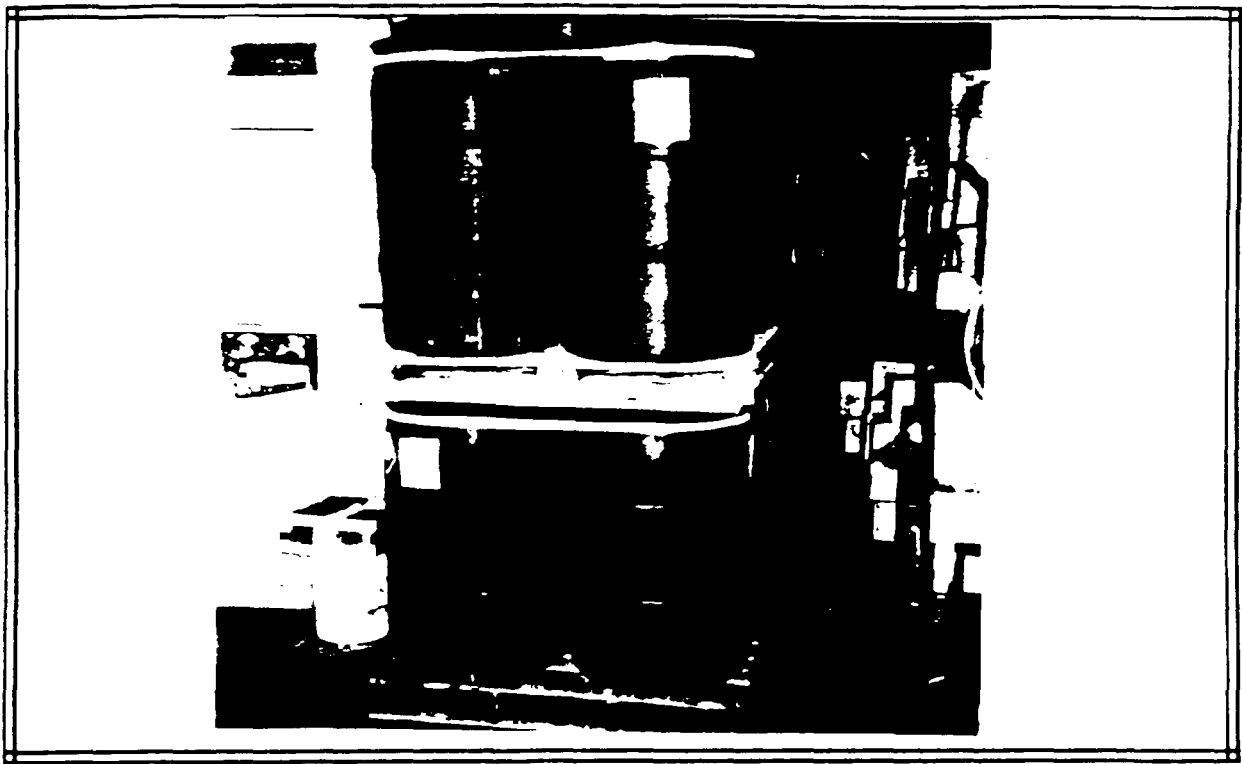
SWMU No. 1, Photo 2, Drain System and Sump



SWMU No. 2, Photo 3, Fume Scrubber



SWMU No. 3, Photo 4, RCRA Hazardous Drum Storage and Holding Area



SWMU No. 3, Photo 5, Hazardous Drum Storage and Handling Area



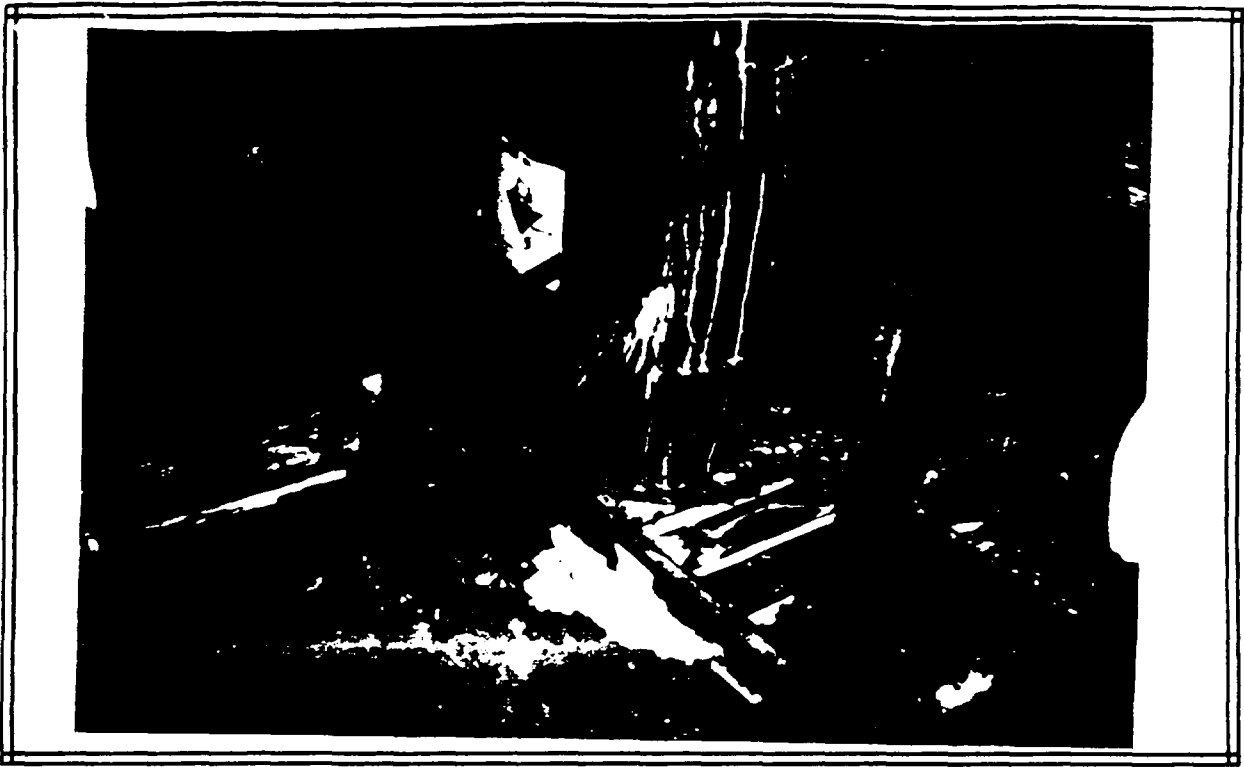
SWMU No. 4, Photo 6, Recovery Drum



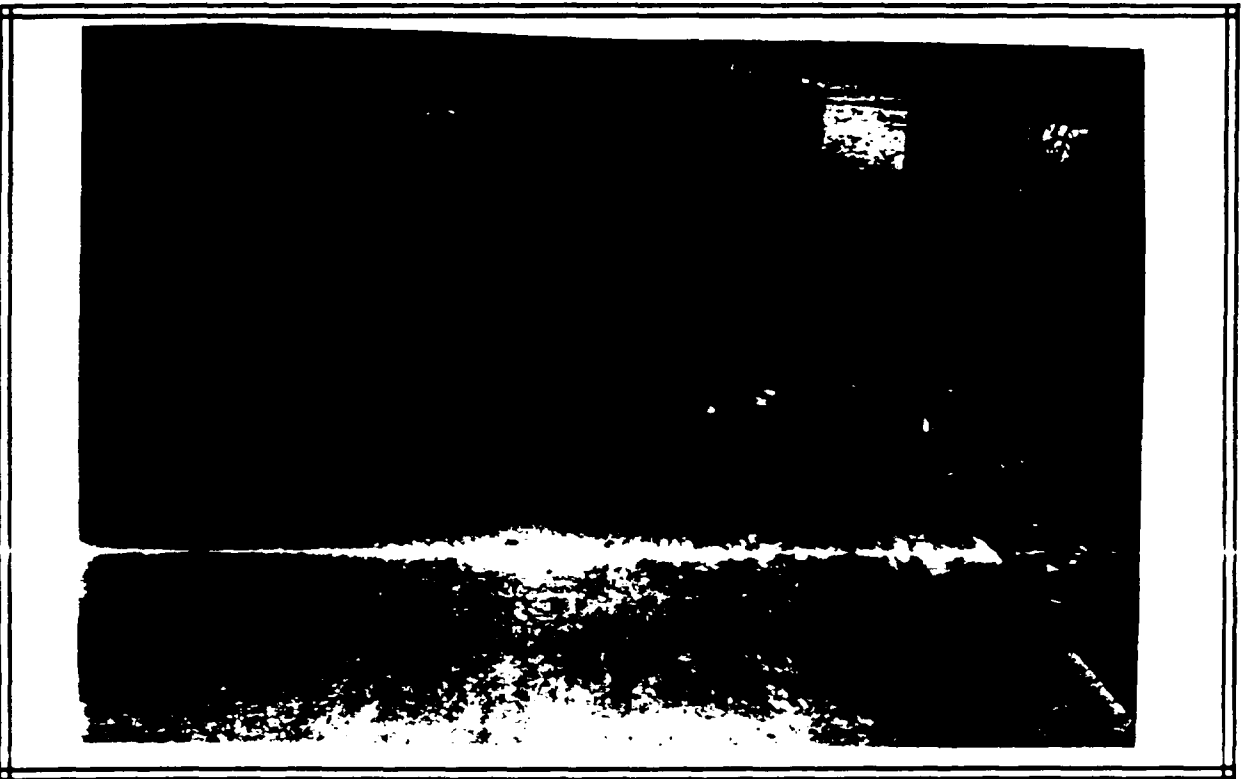
SWMU No. 5, Photo 7, Dumpster



SWMU (AOC) No. 6, Photo 8, Crack in concrete floor



SWMU (AOC) No. 6 Photo 9, Crack in concrete floor



SWMU (AOC) No. 7, Photo 10, Loading Dock Drain



SWAMP (AOC) No. 7, Photo 11, Loading Dock drain effluent discharge

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2. EPA Hazardous Waste Permit Application (EPA Forms 3510-01, 3510-3) for Photo Chemical Systems, Wendell, North Carolina. Filed by Jeff Dykes, Owner, November 17, 1980.
3. Doug McCurry, Chief, Waste Engineering Section, U.S. Environmental Protection Agency, memorandum to Emil Breckling, North Carolina Department of Human Resources (NCDHR), November 25, 1985. Subject: ID number of Photo Chemical Systems.
4. Uniform Hazardous Waste Manifest (EPA Form 8700-22) Document Number CTC0218779 for Photo Chemical Systems (Transporter EPA ID No. NCD08831065), March 20, 1990.
5. Preston Averette, Photo Chemical Systems, telephone conversation with Jerald Tittle, NUS Corporation, July 18, 1990. Subject: Operations.
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9. Margaret Babb, NCDHR, letter to Photo Chemical Systems, September 16, 1987. Subject: Change from generator to small generator.
10. NCDHR, Inspection and Evaluation Report. Filed by staff ID number 07, May 10, 1989.
11. Carroll Burley, South Carolina Department of Health and Environment, letter to Jeff Dykes, Photo Chemical Systems, March 24, 1989. Subject: Transporter ID number.

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13. Jack Moyer, Raleigh Water Department, telephone conversation with Julie Keller, NUS Corporation, January 24, 1990. Subject: Raleigh water system.
14. NUS Corporation Field Logbook No. F4-1972 for Square D Company, TDD No. F4-8910-26. Documentation of visual site inspection and offsite reconnaissance, January 29, 1990.
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16. Wayne Jones, North Carolina Department of Fisheries, telephone conversation with Julie Keller, NUS Corporation, March 26, 1990. Subject: Fishing in Marks Creek and the Neuse River.
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APPENDIX A

OVERSIZED

DOCUMENT

APPENDIX B

PHOTO CHEMICAL SYSTEMS

APPENDIX B F4-8910-29



Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

1. IDENTIFICATION
01 STATE: NC 02 SITE NUMBER: D000831065

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common or post-office name if used) Photo Chemical Systems		02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER 105 Forest Drive			
03 CITY Knightdale	04 STATE NC	05 ZIP CODE 27545	06 COUNTY Wake		07 COUNTY CODE 08 CONG. DIST.
09 COORDINATES LATITUDE 35 48 30.2		LONGITUDE 82 22 42.0			

10 DIRECTIONS TO SITE (Starting from nearest public road)
From Intersection Hwy 69 and Hwy 2049 go east 2 1000 Feet to Forest Drive make Right (North) Turn Facility = 200 Feet on left (west)

III. RESPONSIBLE PARTIES

01 OWNER (if not you) Photo Chemical Systems		02 STREET (Business mailing addresses) 310 N. CAKE Howell Rd			
03 CITY Casselberry	04 STATE FL	05 ZIP CODE	06 TELEPHONE NUMBER ()		
07 OPERATOR (if not an owner or official from owner) Jeff Dykes		08 STREET (Business mailing addresses) 900 Sun Valley Drive			
09 CITY Roswell	10 STATE GA	11 ZIP CODE 30076	12 TELEPHONE NUMBER ()		

13 TYPE OF OWNERSHIP (Check one)
☒ A PRIVATE ☐ B FEDERAL ☐ C STATE ☐ D COUNTY ☐ E MUNICIPAL
☐ F OTHER ☐ G UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A RCRA 3001 DATE RECEIVED MONTH DAY YEAR ☐ B UNCONTROLLED WASTE SITE (CERCLA 103 (d)) DATE RECEIVED MONTH DAY YEAR ☐ C NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 03 26 90 <input type="checkbox"/> NO		02 BY (Check all that apply) <input type="checkbox"/> A EPA <input checked="" type="checkbox"/> B EPA CONTRACTOR <input type="checkbox"/> C STATE <input type="checkbox"/> D OTHER CONTRACTOR <input type="checkbox"/> E LOCAL HEALTH OFFICIAL <input type="checkbox"/> F OTHER			
CONTRACTOR NAME(S)					

03 SITE STATUS (Check one) <input checked="" type="checkbox"/> A ACTIVE <input type="checkbox"/> B INACTIVE <input type="checkbox"/> C UNKNOWN	04 YEARS OF OPERATION 1985 BEGINNING YEAR ENDING YEAR	05 CURRENT UNKNOWN
---------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------	-----------------------

06 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED
Ferric Chloride

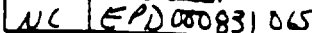
07 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Assible hazard to environment due to concrete floor cracks.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one if not of medium or high priority, complete Part 2. Medium or high priority, complete Part 2. Description of hazardous conditions and priorities)
☐ A HIGH ☒ B MEDIUM ☐ C LOW ☐ D NONE

VI. INFORMATION AVAILABLE FROM

01 CONTACT Peggy Averette	02 OF (Agency/ Organization) Photo Chemical Systems	03 TELEPHONE NUMBER 919 365-7900
04 PERSON RESPONSIBLE FOR ASSESSMENT Terrell T. Hie	05 AGENCY NHS	06 ORGANIZATION 14144387710
07 TELEPHONE NUMBER 14144387710		08 DATE Apr 1 1990 MONTH DAY YEAR



☐ HIGHLY VOLATILE
☐ EXPLOSIVE
☐ REACTIVE
☒ INCOMPATIBLE
☐ NOT APPLICABLE

EPA FORM 2070-13(7-81)



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NC WCD 000 891 045

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The potential for contamination does exist

01 ☒ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The potential of contamination does exist

01 ☐ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
UNKNOWN

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☒ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The potential for contact contamination does exist

01 ☒ F. CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The potential does exist in the event of spillage.

01 ☒ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The potential does exist

01 ☒ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Workers on site have the potential to contract contaminants

01 ☐ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
UNKNOWN



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

NC 000 R31 065

II. HAZARDOUS CONDITIONS AND INCIDENTS Continued

01 ☒ L. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED

Damage to flora does have a potential of occurring

01 ☒ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (INCLUDE REPORT #, IF 1000-100)

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED

Potential damage to the fauna possible.

01 ☒ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED

Potential to the food chain of the fauna.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
Spills, Punctures, Sludging, Leaking, Drums
03 POPULATION POTENTIALLY AFFECTED _____

02 ☐ OBSERVED (DATE 4-26-96) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Drums of caustic substance leaking, staining on floors, possible leaks/spills in past

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE 4-26-96) ☐ POTENTIAL ☐ ALLEGED

Unlikely potential

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED

Facility does discharge to POTW after treating to pH

01 ☐ P. ILLEGAL UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

UNKNOWN

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

Drums awaiting shipment were in an area without an adequate berm

III. TOTAL POPULATION POTENTIALLY AFFECTED: 5090

IV. COMMENTS

V. SOURCES OF INFORMATION (CAN SOURCE, OTHERS, OR STATE AND FEDERAL AGENCIES, ETC.)

EPA-NUS-State Files

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

FEDERAL BUREAU OF INVESTIGATION, N.C.
EPA SITE NUMBER CPD00831065
KNIGHTDALE
TAMU COUNTY, NC
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY: JERALD WITTE

OF 1005

ON 07/27/90

DATE OF THIS REPORT: 12/06/90

DATE OF LAST MODIFICATION: 12/06/90

GROUND WATER ROUTE SCORE: 17.96

SURFACE WATER ROUTE SCORE: 8.15

AIR ROUTE SCORE: 0.00

MIGRATION SCORE: 10.54

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	50 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	44 FEET	2	4
PRECIPITATION	44.0 INCHES		
EVAPORATION	42.5 INCHES		
NET PRECIPITATION	1.5 INCHES	1	1
PERMEABILITY	1.0×10^{-5} CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			9
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: COPPER & COMPOUNDS, NDS			16
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			24
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	2000 FEET		
AND	MATRIX VALUE	35	25
TOTAL POPULATION SERVED	5290 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	5290		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			34

GROUND WATER ROUTE SCORE (S_{gw}) = 17.96

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. DESERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	5.0 %		
INTERVENING SLOPE	5.0 %	1	1
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	50 FEET	3	3
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			13
3. CONTAINMENT	1		1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: COPPER & COMPOUNDS, NOS			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	2
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			5

SURFACE WATER ROUTE SCORE (S_{SW}) = 3.15

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
DRUMS
GALLONS
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS FOR

PAGE 5

SITE: PHOTO CHEMICAL SYSTEMS, N.C.
AS OF 12/06/90

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS 9
CONTAINMENT 1
WASTE CHARACTERISTICS 26
TARGETS 44

$$= 10275 / 57,350 \times 100 = 17.96 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS 15
CONTAINMENT 1
WASTE CHARACTERISTICS 26
TARGETS 6

$$= 2025 / 64,350 \times 100 = 3.15 = S_{sw}$$

AIR ROUTE SCORE

$$\text{OBSERVED RELEASE } 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	3	SP
GROUND WATER ROUTE SCORE (S_{gw})	17.96	322.34
SURFACE WATER ROUTE SCORE (S_{sw})	3.15	9.92
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_{air}^2$		332.40
$\sqrt{(S_{gw}^2 + S_{sw}^2 + S_{air}^2)}$		18.23
$S_M = \sqrt{(S_{gw}^2 + S_{sw}^2 + S_{air}^2)} / 1.73$		10.5%

CERCLA ELIGIBILITY QUESTIONNAIRE

Site Name: Photo Chemical Systems

City: Knightdale

State: North Carolina

EPA ID Number: NCD 000831065

I. CERCLA ELIGIBILITY

Yes

No

Did the facility cease operations prior to November 19, 1980?

—

X

If answer YES, STOP, facility is probably a CERCLA site.

If answer NO, Continue to Part II.

II. RCRA ELIGIBILITY

Yes

No

Did the facility file a RCRA Part A application?

X

—

If YES:

1. Does the facility currently have interim status?

X

—

2. Did the facility withdraw its Part A application?

X

—

3. Is the facility a known or possible protective filer?
(facility filed in error)

—

—

4. Type of facility:

Generator Small Transporter _____ Recycler _____
TSD (Treatment/Storage/Disposal) _____

Does the facility have a RCRA operating or post closure permit?

—

—

Is the facility a late (after 11/19/80) or non-filer that has been identified by the EPA or the State? (facility did not know it needed to file under RCRA)

—

—

If all answers to questions in Part II are NO, STOP, the facility is a CERCLA eligible site.

X If answer to #2 or #3 is YES, STOP, the facility is a CERCLA eligible site.

If answer #2 and #3 are NO and any OTHER answer is YES, site is RCRA, continue to Part III.

III. RCRA SITES ELIGIBLE FOR NPL

Yes

No

Has the facility owner filed for bankruptcy under federal or state laws?

—

—

Has the facility lost RCRA authorization to operate or shown probable unwillingness to carry out corrective action?

—

—

Is the facility a TSD that converted to a generator, transporter or recycler facility after November 19, 1980?

—

—

DRAFT

ENVIRONMENTAL PRIORITIES INITIATIVE
PRELIMINARY ASSESSMENT OF
PHOTO CHEMICAL SYSTEMS
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
EPA ID #NCD000831065

*Approved
2/25/91
NFRAP
Earl Bozeman*

Prepared Under
TDD No. F4-8910-29
CONTRACT No. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

NOVEMBER 30, 1990

NUS CORPORATION
SUPERFUND DIVISION

Prepared By


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NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency (EPA) under Contract Number 68-01-7346 and is considered proprietary to the EPA.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
1.1 Objective	1
1.2 Scope of Work	1
2.0 SITE DESCRIPTION	2
2.1 Site Location	2
2.2 Site Features	2
2.3 Ownership History	2
2.4 Nature of Operations	2
2.5 Permit and Regulatory History	5
3.0 ENVIRONMENTAL SETTING	6
3.1 Water Supply	6
3.2 Surface Water	6
3.3 Climatological, Meteorological, and Hydrogeological Factors	6
3.4 Critical Habitats and Endangered Species	7
4.0 VISUAL SITE INSPECTION (VSI)	8
4.1 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)	8
4.2 VSI Participants	8
REFERENCES	24
APPENDIX A Topographic Map	
APPENDIX B Preliminary Assessment Form	

TABLES

Table 1	Solid Waste Management Units (SWMU) and Areas of Concern (AOC) Identification Summary	10
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FIGURES

Figure 1	Site Location Map	3
Figure 2	Solid Waste Management Units, Areas of Concern, and Photograph Locations	4

EXECUTIVE SUMMARY

Photo Chemical Systems is located on Forest Drive, one block north of U.S. Highway 64, near the town of Knightdale, North Carolina. The 1-acre facility consists of one warehouse with office space. Photo Chemical Systems began operations at this facility during 1985 and continues at the present time. Photo Chemical Systems blends chemicals for the electronic and printing industry.

On November 17, 1980, Photo Chemical Systems filed a RCRA Part A Hazardous Waste Permit application as a storage facility. After a formal request to submit a Part B Hazardous Waste Permit application, Photo Chemical Systems requested to have its Part A withdrawn due to insurance requirements. Photo Chemical Systems operated as a generator at its former location in Wendell, North Carolina; currently it is operating as a small-quantity generator.

Photo Chemical Systems has operated from locations in Wendell and Knightdale, North Carolina. Confusion has occurred because Photo Chemical Systems was allowed to maintain its original EPA ID number after moving to the latter location.

The majority of the population within 3 miles of the facility is served by private wells. The city of Knightdale serves approximately 350 connections with water obtained from three wells located between 1 and 2 miles southwest of the facility. The city of Knightdale also serves approximately 650 connections with surface water purchased from the city of Raleigh. A house count indicates approximately 1,392 residences within 3 miles of the facility not served by municipal water. The estimated population served by groundwater within 3 miles of the facility is 5,290.

Surface water runoff from the facility enters an unnamed tributary of Beaverdam Creek which then flows into the Neuse River approximately 3 miles to the west. The Neuse River is used for recreational fishing. No critical habitats were identified along the surface water pathway for a distance of 15 miles.

The Visual Site Inspection (VSI) conducted during the investigation identified five Solid Waste Management Units (SWMUs) and two Areas of Concern (AOCs). Two SWMUs and two AOCs are recommended for further action.

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) conducted a Preliminary Assessment (PA) and a Visual Site Inspection (VSI) at Photo Chemical Systems on March 26, 1990. The task was performed as a part of the Environmental Priorities Initiative (EPI) program as stated in Technical Directive Document (TDD) No. F4-8910-29.

1.1 OBJECTIVE

The major objective of the EPI program is to conduct an onsite and offsite inspection of the assigned facility in order to characterize the Solid Waste Management Units (SWMUs), associated releases, and other Areas of Concern (AOCs). The inspection is conducted in a two-phase operation; the Preliminary Review, which includes the review and evaluation of specific file documents; and the VSI, which identifies all SWMUs, known releases, and AOCs.

1.2 SCOPE OF WORK

The scope of this investigation included the following activities:

- A search of state and EPA files in an attempt to obtain and review specific documents (RCRA, CERCLA, AIR, and NPDES) that will help characterize the facility.
- Development of a detailed facility, base map showing site features, SWMU locations, AOCs, and photo-documentation areas.
- Evaluation of target populations within a 3-mile radius from the site with regard to groundwater and air, and within a 15-mile stream distance for surface water.
- A private well survey within a 3-mile radius of the facility.
- Inspection and photo-documentation of all SWMUs and related releases and exposure pathways.
- Inspection and photo-documentation of all AOCs.

2.0 SITE DESCRIPTION

2.1 SITE LOCATION

Photo Chemical Systems is located in eastern Wake County one block north of U.S. Highway 64, approximately 15 miles east of Raleigh, North Carolina, near the town of Knightdale, North Carolina. The address is 105 Knightdale Drive, Knightdale, North Carolina. The coordinates of the plant building are latitude: 35° 48' 00" N and longitude: 78° 28' 42" W (Appendix A, Figure 1) (Ref. 1).

2.2 SITE FEATURES

The facility is located on approximately 1 acre of land. The plant occupies approximately one-eighth of the property and allows unrestricted access because it is unfenced. The facility consists of one building which is divided into an office area and warehouse/chemical mixing area (Figure 2) (Ref. 1).

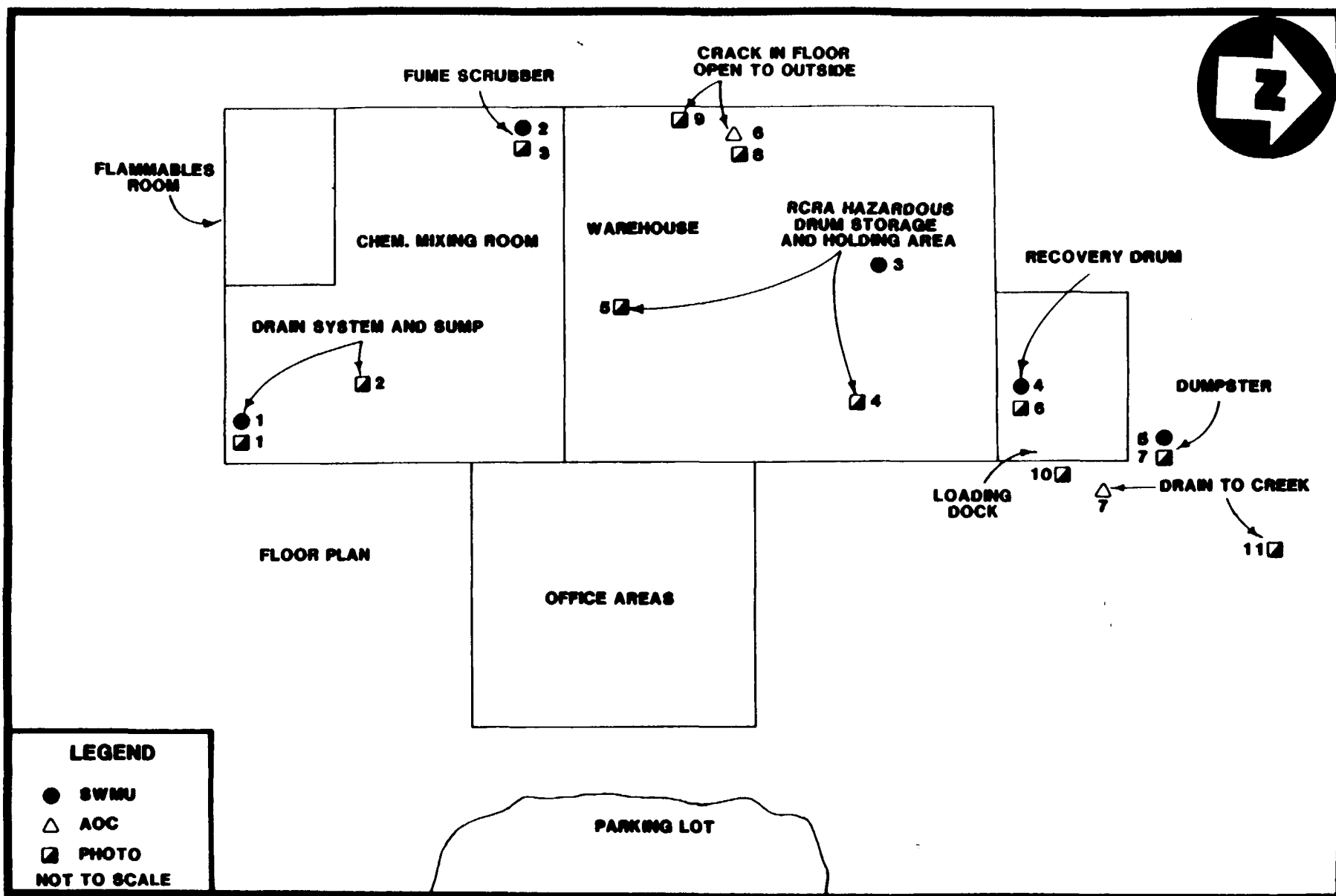
2.3 OWNERSHIP HISTORY

Photo Chemical Systems is owned by Jeff Dykes of 900 Sun Valley Drive, Roswell, Georgia 30076 (Ref. 2).

2.4 NATURE OF OPERATIONS

Photo Chemical Systems in Knightdale, North Carolina, has been operating since 1985. Former operations were conducted in Wendell, North Carolina (Ref. 2). Much of the file material relates to the Wendall location during the period of 1976 to 1985. The facility under investigation is currently operating under the original EPA identification number NCD000831065 assigned to the Wendell facility (Refs. 3, 4).

The majority (95%) of Photo Chemical Systems' operations consist of wholesaling drummed commercial chemicals. The remaining 5 percent of business consists of mixing and blending the chemical products prior to sale. As a service to its' customers, Photo Chemical Systems acts as a staging area for spent liquid chemicals. Fifty, 5-gallon drums of various chemicals are stored for less than 90 days prior to shipping to waste reclaimers (Ref. 5).



**SOLID WASTE MANAGEMENT UNITS, AREA OF CONCERN
AND PHOTOGRAPH LOCATIONS
PHOTO CHEMICAL
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA**

2.5 PERMIT AND REGULATORY HISTORY

Photo Chemical Systems filed a RCRA Part A Hazardous Waste Permit Application as a storage facility on November 17, 1980 (Ref. 2). This application was filed while Photo Chemical Systems was located at E. Wilson Road in Wendell, North Carolina, approximately 10 miles east of its current location in Knightdale, North Carolina. Photo Chemical Systems then filed for an address change (Ref. 6). On December 5, 1985, the Waste Engineering Section of the EPA granted Photo Chemical Systems retention of its original identification number, even though they had moved several miles to a new location (Ref. 3). A uniform Hazardous Waste Manifest indicates that Photo Chemical Systems is currently using EPA ID Number NCD000831065 (Ref. 4). After a request by the state of North Carolina, Photo Chemical Systems indicated that a Part B application would not be filed (Ref. 7). Photo Chemical Systems requested withdrawal of the Part A (interim status) on August 27, 1987 (Ref. 8). On September 15, 1987, Photo Chemical Systems was granted a requested change in classification to a small-quantity generator (Ref. 9).

During a RCRA generator inspection conducted by the North Carolina Department of Human Resources on May 5, 1989, the Photo Chemical Systems' facility was found to be in compliance with all applicable regulations (Ref. 10). The status of its transportation permit, however, is unknown. Photo Chemical Systems transportation permit expired on October 25, 1987, and has not been reapplied for since March 1989 (Ref. 11). An investigation report submitted by the New Jersey Department of Environmental Protection to the state of North Carolina on February 11, 1986, indicated that Photo Chemical Systems was in violation of state transporter regulations (Ref. 12).

3.0 ENVIRONMENTAL SETTING

The Environmental Setting Section, in addition to the Topographic Map (Appendix A) and Preliminary Assessment Form (Appendix B), provide information to evaluate the potential for a release to groundwater and surface water resources and other receptors.

3.1 WATER SUPPLY

The majority of the population within 3 miles of Photo Chemical Systems is served by private wells (Ref. 13). The city of Knightdale water system provides service to about 1,000 connections using two distribution systems. One system serves within the city limits of Knightdale. Approximately 350 connections are serviced by water from three wells. The other system receives surface water purchased from the city of Raleigh and serves several new subdivisions along Highway 64; this system also sells water to the city of Wendell (Appendix A). A house count using topographic maps identified approximately 1,392 residences using private wells within the 3-mile radius. Between the 3- and 4-mile radii, approximately 986 households are served by private wells. The estimated population using private wells within 3 miles of the facility is, therefore, 5,290 (1,392 private wells x 3.8 people/household) (Appendix A) (Refs. 14, p. 11).

3.2 SURFACE WATER

Surface water runoff from the facility flows approximately 50 feet before entering an unnamed tributary of Beaverdam Creek. This tributary flows for approximately 1.5 miles northwest before entering Beaverdam Creek. Beaverdam Creek enters the Neuse River after 2.0 miles and then flows southeast for the remainder of the 15-mile migration pathway (Appendix A). There are no permitted surface water intakes located along the surface water migration route (Ref. 15). The Neuse River is fished by recreational fishermen for sunfish, channel catfish, and largemouth bass (Ref. 16).

3.3 CLIMATOLOGICAL, METEOROLOGICAL, AND HYDROGEOLOGICAL FACTORS

The site lies in eastern Wake County and overlies an extensive granitic intrusion of adamellite. The adamellite is characterized as medium-grained, massive, gray, granitic rock, and maps indicate numerous diabase dikes intruding into the adamellite body. Cuttings from boreholes done on the nearby Square D Company site show weathered granitic material beginning between 4 and 10 feet below the surface, overlain by coarse, sandy materials. The soil series on the site is

Wedowee-Durham-Louisburg, which is typically firm, clayey soils on felsic rocks, such as granite or Carolina slates. The upper subsurface beneath the site consists of residual soil grading downward into saprolite and then into the unweathered adamellite. Solid bedrock, the unweathered adamellite, lies about 10 to 60 feet below the surface (Ref. 17, p. 4).

The saturated portion of the regolith and the water within fractures of the crystalline rocks are hydraulically connected and together comprise the regolith/crystalline rock aquifer. The regolith/crystalline rock aquifer is the aquifer of concern in the Raleigh, North Carolina, area. It is an unconfined (water-table) aquifer. Recharge to the aquifer results from the infiltration of rainfall through the unsaturated portion of the regolith to the saturated portion of the regolith and fractures in the crystalline rocks. Water in the fractures rarely exceeds a depth of 300 to 400 feet below land surface (Refs. 18, pp. 1-11; 19, p. 330). The hydraulic conductivity in the overlying soils ranges from 1×10^{-2} to 1×10^{-5} cm/sec (Ref. 17, p. 5). Depth to groundwater roughly reflects the topographic relief of the land surface. In the vicinity of Photo Chemical Systems, this depth is approximately 50 feet (Appendix A).

The climate in the Wake County, North Carolina, area is warm, moist, and temperate. The net annual temperature generally ranges from 51° to 70° F (Ref. 20, p. 1). The average annual rainfall is 44 inches, and the net precipitation in the Raleigh area is approximately 3 inches (Ref. 21, pp. 43, 63). The 1-year, 24-hour rainfall is 3.5 inches (Ref. 22, p. 93).

3.4 CRITICAL HABITATS AND ENDANGERED SPECIES

No critical habitats were identified along the surface water pathway for a distance of 15 miles. There are, however, federally endangered, as well as threatened species found in this part of the state (Ref. 23).

4.0 VISUAL SITE INSPECTION (VSI)

The VSI of the Photo Chemical Systems' facility was performed on March 26, 1990 (Ref. 1). The VSI focused on the past and present waste streams at the facility in order to identify all Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) and to collect information beneficial in assessing potential to release hazardous waste or constituents to the environment.

4.1 SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs)

Five SWMUs were identified at the Photo Chemical Systems' facility during the VSI. Additionally, two AOCs were identified. SWMUs identified include the drain system and sump, the fume scrubber, the RCRA-regulated hazardous drum storage area, a recovery drum, and a dumpster. The AOCs identified include a crack in the floor and a drain to the creek.

During the VSI, personnel representing Photo Chemical Systems accompanied the NUS Field Investigation team members. The VSI was conducted in a fashion that attempted to follow the same route in which wastes are handled at the facility (Ref. 1).

All SWMUs and AOCs are delineated on Table 1, are located on Figure 2, and further discussed in this section. Photographs were taken of all SWMUs and AOCs and are keyed to the photograph locations on Figure 2. Photographs with documentation follow this section.

The weather conditions at the facility during the VSI were sunny with temperatures around 60° F. Ground conditions during the VSI were dry (Ref. 1).

4.2 VSI PARTICIPANTS

The following people were present during the VSI:

Jerald Tittle	Preston Averette
NUS Corporation	Plant Manager
Project Manager	Photo Chemical Systems
Environmental Scientist	

Bob Rose
NUS Corporation
Environmental Scientist

Danny Griswell
Warehouse Manager
Photo Chemical Systems

TABLE 1

**SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) IDENTIFICATION SUMMARY
PHOTO CHEMICAL SYSTEMS
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA**

SWMU Number	Name of Unit	Years of Operation	Waste Managed	Evidence of Release	Recommendation		
					No Further Action	Further Assessment	Sampling
1 (SWMU)	Drain System and Sump	5	Ferric chloride	Yes		A	
2 (SWMU)	Fume Scrubber	5	Ferric chloride, sodium hydroxide	None	X		
3 (SWMU)	RCRA Hazardous Drum Storage/Holding Area	5	D008 and D010	None	X		
4 (SWMU)	Recovery Drum	5	Fluoroboric acid	None		B	
5 (SWMU)	Dumpster	5	Office waste and nonputrescible materials	None	X		
6 (AOC)	Crack in Floor	5	Any materials stored in warehouse; NaOH was stored adjacent to area	None		C	
7 (AOC)	Drain to Creek	3	Mostly drains rainwater	None	X		

A - Seal crack around lip of floor sump and install an overflow warning system.

B - Drum should be stored in area designed to contain any further spillage.

C - Repair concrete floor, construct berm around storage area.

SWMU NUMBER: 1

SWMU NAME: Drain System and Sump

SWMU DESCRIPTION: This unit consists of eight floor drains. These drains are located as follows: six in the chemical mixing room and one each in the flammables room and warehouse. Each of these leads to a central, 45-gallon, polyvinyl chloride drum sunk into the concrete floor of the southeast corner of the chemical mixing room. Any liquids entering the drum are pumped upward into a 250-gallon, holding tank. This tank is approximately 2 feet above the floor. Liquids are pH-neutralized and discharged to the municipal sewer system from the holding tank (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Ferric chloride was the chemical most often mixed or blended in this area.

RELEASE CONTROLS: The chemical mixing room is curbed by a 6-inch, concrete berm. No overflow indicators were installed at the time of the VSI.

RELEASE HISTORY: There is no record or documentation of any environmental impact on or off site from materials disposed of in this unit. However, cracks in the floor are visible. Ferric chloride has stained the area around sump (Ref. 1).

INTERIM

RECOMMENDATIONS: Seal cracks in concrete floor where the drum and the concrete meet. Install overflow alarms on both containers.

PHOTOGRAPH NOS.: 1A, 1B

SWMU NUMBER: 2

SWMU NAME: Fume Scrubber

SWMU DESCRIPTION: This unit consists of fume collection hoods, piping, and a fume scrubber. The hoods are located above each of the three blending tanks used by Photo Chemical Systems. These tanks are located along the north wall of the chemical mixing room. Fumes from blending tanks are vented via polyvinyl chloride piping into the scrubber which is in the northwest corner of the chemical mixing room. Fumes are circulated through a water bath to be absorbed. This water is neutralized and discharged into the municipal sewer system. No filters are used on this unit. Manual controls are necessary for operation (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Waste managed includes fumes from process chemicals. Ferric chloride and sodium hydroxide are most often used in the blending tanks under the hoods.

RELEASE CONTROLS: The only method of control was via a manually operated electrical switch.

RELEASE HISTORY: There are no records or documentation of any environmental impact on or off site from materials disposed of in this unit (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NO.: 2

SWMU NUMBER: 3

SWMU NAME: RCRA Hazardous Drum Storage and Holding Area

SWMU DESCRIPTION: This unit consists of a hazardous waste holding area. A total of forty-four, 55-gallon drums were present during the Visual Site Inspection (VSI). These drums were located in the warehouse. Drums were properly labeled and stacked. Forty-two drums contained spent ammonial etch, labeled D008 (lead), and two were labeled D010 (selenium). Drums were awaiting shipment to C.P. Chemical of Sumter, South Carolina (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit was placed into service in 1990.

DATE OF CLOSURE: The unit was active during the VSI.

WASTES MANAGED: Waste liquids stored in this unit include RCRA-regulated D008 and D010 (Ref. 1).

RELEASE CONTROLS: No release controls were observed near the area of drum storage. The area was a warehouse with a flat, concrete floor.

RELEASE HISTORY: According to Photo Chemical Systems' personnel, there have been no releases from this unit (Ref. 1, p. 10). During the VSI no leaks or releases were observed (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NOS.: 3A, 3B

SWMU NUMBER: 4

SWMU NAME: Recovery Drum

SWMU DESCRIPTION: This unit consists of a steel, 70-gallon, recovery drum containing a clay absorbent material located at the entrance from the loading dock area. This material was placed into service to contain an accidental spillage of approximately 2 quarts of fluroboric acid.

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit was placed into service on March 5, 1990.

DATE OF CLOSURE: This unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Fluroboric acid was currently being managed.

RELEASE CONTROLS: Absorbent materials are used to contain accidental spillage. The absorbents are then shipped to C.P. Chemical Reclaimers of South Carolina. There were no observed release controls. These drums are placed into service as emergency release controls.

RELEASE HISTORY: According to Photo Chemical Systems' personnel, an accidental release of approximately 2 quarts of fluroboric acid occurred on March 5, 1990 (Ref. 1).

INTERIM

RECOMMENDATIONS Drums should be stored in an area of proper design to contain any accidental spillage.

PHOTOGRAPH NO.: 4

SWMU NUMBER: 5

SWMU NAME: Dumpster

SWMU DESCRIPTION: The 10-cubic-yard, metal dumpster has two doors on top that may be opened to receive materials. This unit is located near the loading docks at the north side of the building and is placed on a gravel pad. The unit is removed weekly by BFI and taken to the county landfill (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this unit is believed to have been placed into service in 1985.

DATE OF CLOSURE: The unit was active during the Visual Site Inspection (VSI).

WASTES MANAGED: This unit is used to store office waste and other nonputrescible materials.

RELEASE CONTROLS: This unit has lids which would prevent rainwater and animals from entering.

RELEASE HISTORY: According to Photo Chemical Systems' personnel there have been no on or offsite releases from this unit. During the VSI there was no evidence of a release from this unit (Ref. 1).

INTERIM

RECOMMENDATIONS: No Further Action.

PHOTOGRAPH NO.: 5

AOC NUMBER: 6

AOC NAME: Crack in Floor - Open to Outside

AOC

DESCRIPTION: This area consists of a hole in the concrete floor approximately 2 x 2 inches, under the west wall of the warehouse, which was apparently caused by settling of the building. This hole is approximately 30 feet from the northwest corner and 10 feet from a drum of sodium hydroxide which shows signs of leakage (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this Area of Concern (AOC) is believed to have been placed into service in approximately 1985.

DATE OF CLOSURE: This AOC was active during the Visual Site Inspection (VSI).

WASTES MANAGED: Sodium hydroxide was stored adjacent to area.

RELEASE CONTROLS: No release controls were observed during the VSI, and substances entering these cracks may reach the outside environment.

RELEASE HISTORY: Photo Chemical Systems' personnel have no record of any release from this area.

INTERIM

RECOMMENDATIONS: The hole in the floor should be repaired and a berm constructed which would enclose the entire chemical storage area.

PHOTOGRAPH NOS.: 6A, 6B

AOC NUMBER: 7

AOC NAME: Drain to Creek

AOC

DESCRIPTION: The Area of Concern (AOC) consists of a 3-inch, PVC pipe that drains the truck-ramp area during storms. The drain flows underground approximately 50 feet where it enters an unnamed tributary of Beaverdam Creek. The truck ramp is constructed of concrete block retaining walls with a concrete deck. The total volume is approximately 24' x 20' x 16" (Ref. 1).

DATE OF START-UP: According to Photo Chemical Systems' personnel, this AOC is believed to have been placed into service in January 1987.

DATE OF CLOSURE: This AOC was active during the Visual Site Inspection.

WASTES MANAGED: This AOC normally routes rainwater away from the facility; however, any accidental spillage around the loading dock may enter this pipe.

RELEASE CONTROLS: Normal operations required the manual opening or closing via a cap-like plug.

RELEASE HISTORY: There was no history of a release. Rainwater or other liquids drain off site via associated pipes.

INTERIM

RECOMMENDATIONS: No Further Action.

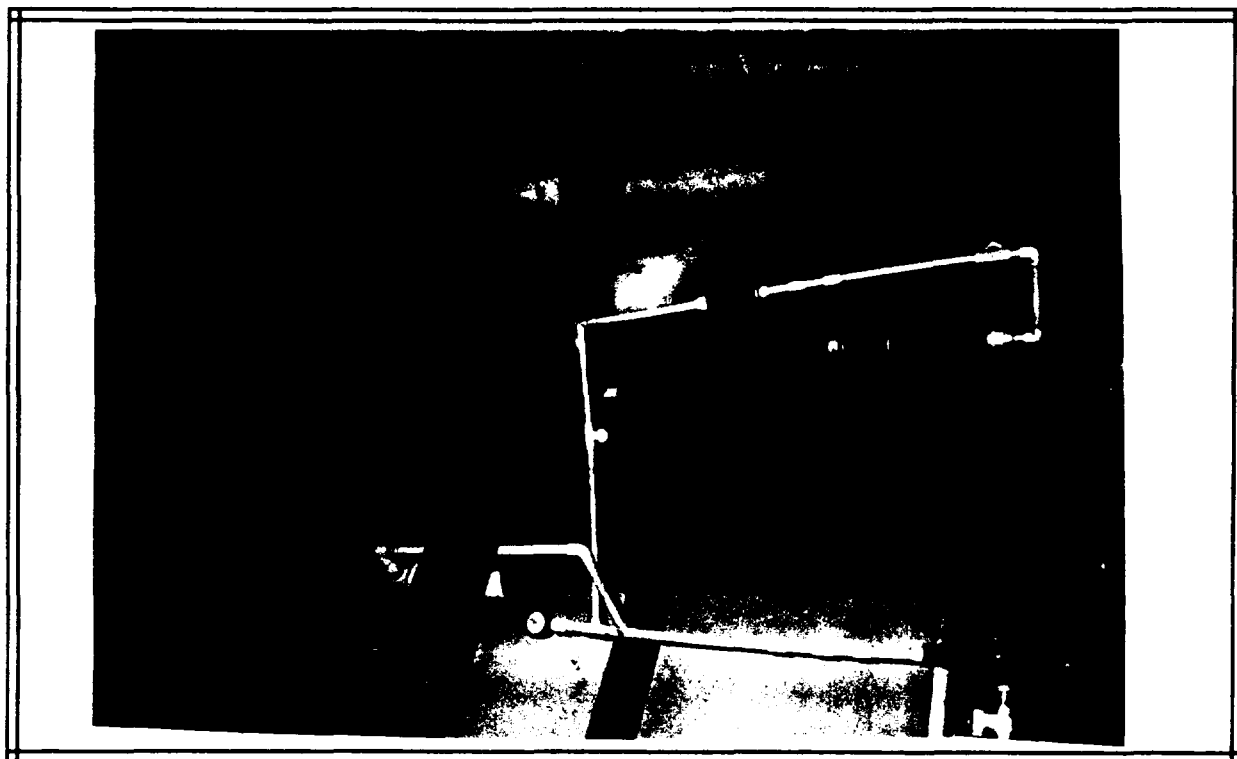
PHOTOGRAPH NO.: 7



SWMU No. 1, Photo 1, Drain System and Sump



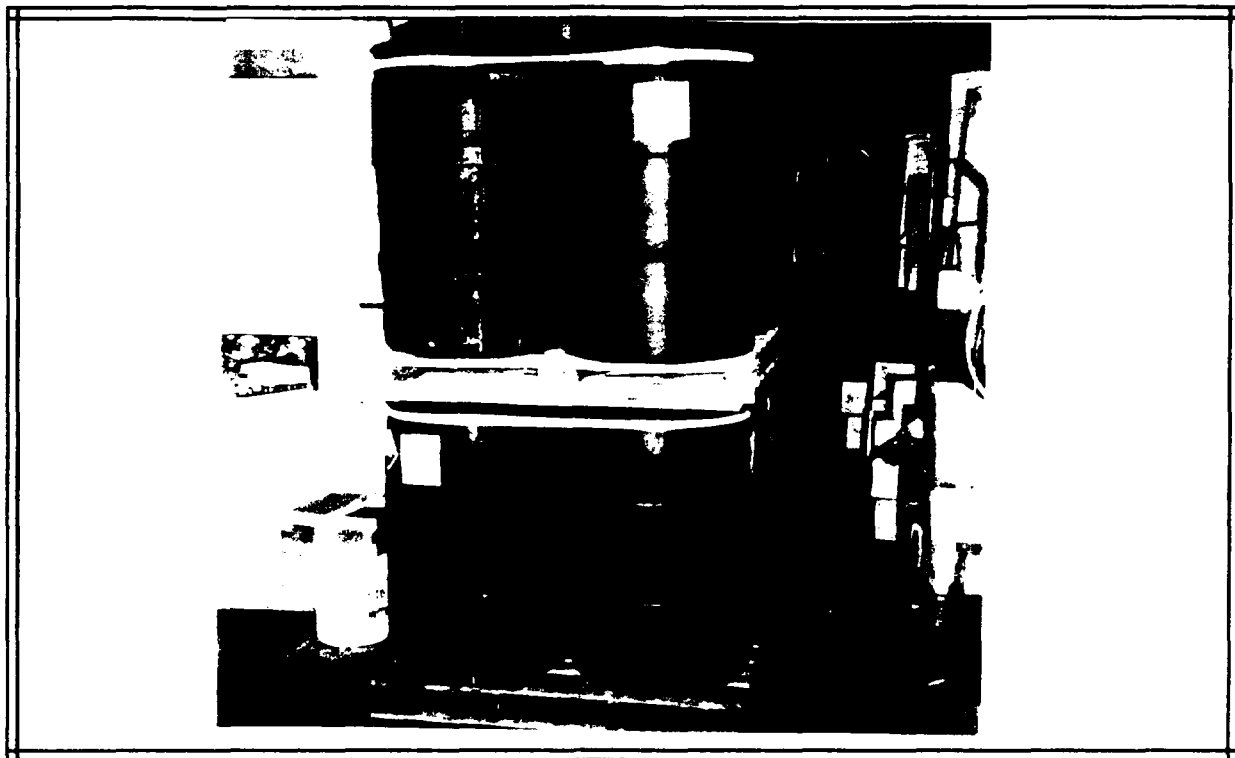
SWMU No. 1, Photo 2, Drain System and Sump



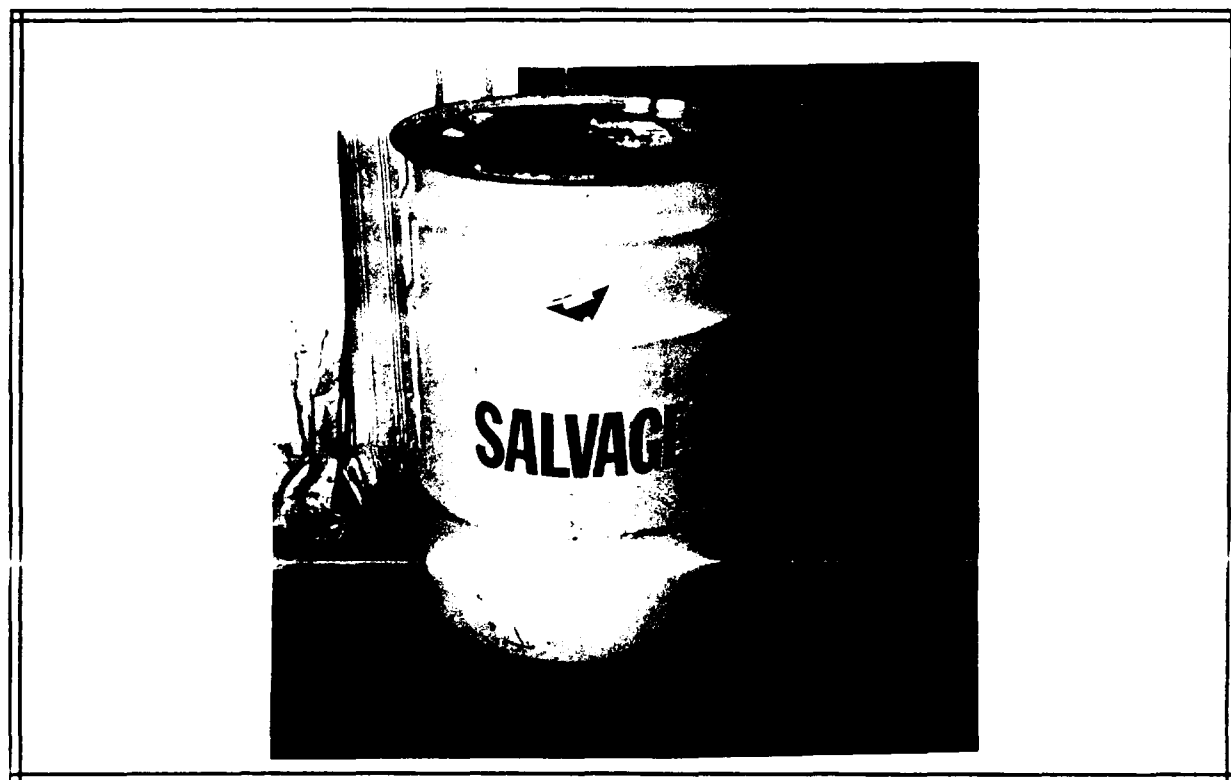
SWMU No. 2, Photo 3, Fume Scrubber



SWMU No. 3, Photo 4, RCRA Hazardous Drum Storage and Holding Area



SWMU No. 3, Photo 5, Hazardous Drum Storage and Handling Area



SWMU No. 4, Photo 6, Recovery Drum



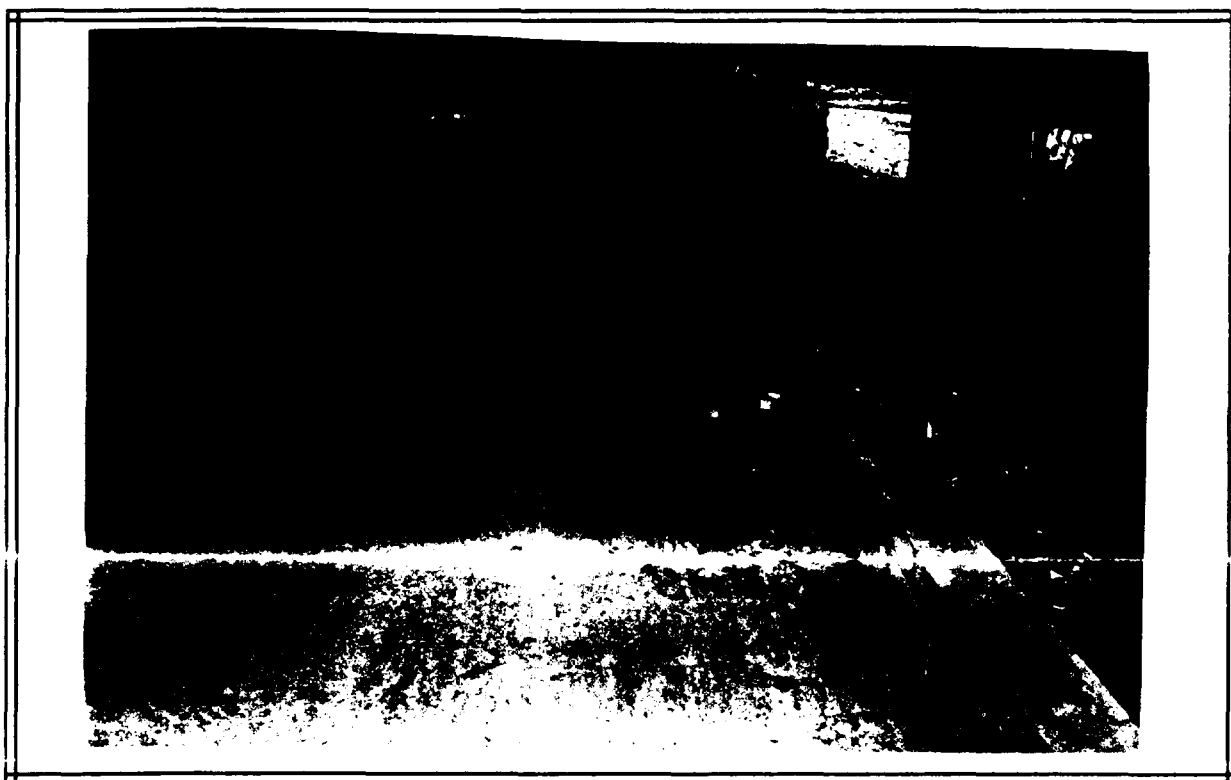
SWMU No. 5, Photo 7, Dumpster



SWMU (AOC) No. 6, Photo 8, Crack in concrete floor



SWMU (AOC) No. 6, Photo 9, Crack in concrete floor



SWMU (AOC) No. 7, Photo 10, Loading Dock Drain



SWMU (AOC) No. 7, Photo 11, Loading Dock drain effluent discharge

REFERENCES

1. NUS Corporation Field Logbook No. F4-2117 for Photo Chemical Systems, TDD No. F4-8910-29. Documentation of visual site inspection and offsite reconnaissance, March 26, 1990.
2. EPA Hazardous Waste Permit Application (EPA Forms 3510-01, 3510-3) for Photo Chemical Systems, Wendell, North Carolina. Filed by Jeff Dykes, Owner, November 17, 1980.
3. Doug McCurry, Chief, Waste Engineering Section, U.S. Environmental Protection Agency, memorandum to Emil Breckling, North Carolina Department of Human Resources (NCDHR), November 25, 1985. Subject: ID number of Photo Chemical Systems.
4. Uniform Hazardous Waste Manifest (EPA Form 8700-22) Document Number CTC0218779 for Photo Chemical Systems (Transporter EPA ID No. NCD08831065), March 20, 1990.
5. Preston Averette, Photo Chemical Systems, telephone conversation with Jerald Tittle, NUS Corporation, July 18, 1990. Subject: Operations.
6. Kenneth R. Finch, Warehouse Manager, Photo Chemical Systems, Application Form to William L. Meyer, NCDHR, May 14, 1985. Subject: Address change.
7. O.W. Strickland, Head, North Carolina Solid and Hazardous Waste Management Branch, letter to Preston Averette, Photo Chemical Systems, March 13, 1984. Subject: Part B.
8. Jeff Dykes, Owner, Photo Chemical Systems, letter to Pam Cable, NCDHR, August 27, 1987. Subject: Part A.
9. Margaret Babb, NCDHR, letter to Photo Chemical Systems, September 16, 1987. Subject: Change from generator to small generator.
10. NCDHR, Inspection and Evaluation Report. Filed by staff ID number 07, May 10, 1989.
11. Carroll Burley, South Carolina Department of Health and Environment, letter to Jeff Dykes, Photo Chemical Systems, March 24, 1989. Subject: Transporter ID number.

12. Ronald Corcory, Chief, State of New Jersey Department of Environmental Protection, letter to NCDHR, February 11, 1986. Subject: Transporter violations.
13. Jack Moyer, Raleigh Water Department, telephone conversation with Julie Keller, NUS Corporation, January 24, 1990. Subject: Raleigh water system.
14. NUS Corporation Field Logbook No. F4-1972 for Square D Company, TDD No. F4-8910-26. Documentation of visual site inspection and offsite reconnaissance, January 29, 1990.
15. North Carolina Division of Health Services, Environmental Health Section, Water Supply Branch, Public Water Supply Data Sheet for Surface Water, September 14, 1988.
16. Wayne Jones, North Carolina Department of Fisheries, telephone conversation with Julie Keller, NUS Corporation, March 26, 1990. Subject: Fishing in Marks Creek and the Neuse River.
17. Site Inspection Report, Square D Company. Filed by Grover Nicholson, North Carolina Solid and Hazardous Waste Management Branch, Environmental Health Section, January 1, 1986.
18. Harry E. LeGrand, Groundwater of the Piedmont and Blue Ridge Provinces in the Southeastern States, Circular 538 (Washington, D.C., GPO: United States Geological Survey, 1967), pp. 1-11.
19. U.S. Geological Survey, National Water Summary 1984: Hydrologic Events Selected Water Quality Trends and Ground-Water Resources, Water-Supply Paper 2275 (1984), pp. 329-332.
20. J.M. Parker III, Geology and Mineral Resources of Wake County, Bulletin 86 (Raleigh, North Carolina: North Carolina Geological Survey, 1979), p. 1.
21. U.S. Department of Commerce, Climatic Atlas of the United States (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanographic and Atmospheric Administration.
22. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper No. 40 (Washington, D.C.: GPO, 1961, p. 93).
23. U.S. Fish and Wildlife Service, Endangered and Threatened Species of the Southeastern United States (Atlanta, Georgia, 1988).

OVERSIZED

DOCUMENT

PHOTO CHEMICAL SYSTEMS

APPENDIX B F4-8910-29



Site Inspection Report

Ref # 5609



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
NC 000831065

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Photo Chemical Systems		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 105 Forest Drive			
03 CITY Knightdale	04 STATE NC	05 ZIP CODE 27545	06 COUNTY Wake	07 COUNTY CODE	08 CONG DIST
09 COORDINATES LATITUDE 35 48 00.0		LONGITUDE 78 22 42.0			
10 DIRECTIONS TO SITE (Starting from nearest public road): From Intersection Hwy 69 and Hwy 2049 go east 2 1000 Feet to Forest Drive make Right (North) Turn Facility = 200 Feet on left (west)					

III. RESPONSIBLE PARTIES

01 OWNER (if known) Photo Chemical Systems		02 STREET (Business mailing address) 310 N. Lake Howell Rd			
03 CITY Casselberry	04 STATE FL	05 ZIP CODE	06 TELEPHONE NUMBER ()		
07 OPERATOR (if known and different from owner) Jeff Dykes		08 STREET (Business mailing address) 900 Sun Valley Drive			
09 CITY Roswell	10 STATE GA	11 ZIP CODE 30076	12 TELEPHONE NUMBER ()		
13 TYPE OF OWNERSHIP (Check one): <input checked="" type="checkbox"/> A PRIVATE <input type="checkbox"/> B FEDERAL <input type="checkbox"/> C STATE <input type="checkbox"/> D COUNTY <input type="checkbox"/> E MUNICIPAL <input type="checkbox"/> F OTHER (Specify:) <input type="checkbox"/> G UNKNOWN					

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check at this entry)

☐ A RCRA 3001 DATE RECEIVED MONTH DAY YEAR ☐ B UNCONTROLLED WASTE SITE (RCRA 103(c)) DATE RECEIVED MONTH DAY YEAR ☐ C NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 03 26 90 <input type="checkbox"/> NO		BY (Check at this entry): <input type="checkbox"/> A EPA <input checked="" type="checkbox"/> B EPA CONTRACTOR <input type="checkbox"/> C STATE <input type="checkbox"/> D OTHER CONTRACTOR <input type="checkbox"/> E LOCAL HEALTH OFFICIAL <input type="checkbox"/> F OTHER (Specify:)			
02 SITE STATUS (Check one): <input checked="" type="checkbox"/> A ACTIVE <input type="checkbox"/> B INACTIVE <input type="checkbox"/> C UNKNOWN		03 YEARS OF OPERATION 1985 CURRENT <input type="checkbox"/> UNKNOWN BEGINNING YEAR ENDING YEAR			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED Ferric Chloride					

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Possible hazard to environment due to concrete floor cracks.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one if high or medium is selected, otherwise Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A HIGH (Inspection required immediately) ☒ B MEDIUM (Inspection required) ☐ C LOW (Inspection on site available basis) ☐ D NONE (No further action required, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Preston Averette	02 OF (Agency/Organization) Photo Chemical Systems	03 TELEPHONE NUMBER 919 365-792
04 PERSON RESPONSIBLE FOR ASSESSMENT Jerald T. Hie	05 AGENCY NHS	06 ORGANIZATION NHS
	07 TELEPHONE NUMBER 414 937 7710	08 DATE Apr 11 90 MONTH DAY YEAR



☐ HIGHLY VOLATILE
☐ EXPLOSIVE
☐ K REACTIVE
☒ INCOMPATIBLE
☐ M NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
NC WCD 000 851 055

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The potential for contamination does exist

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The potential of contamination does exist

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Unknown

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The potential for contact contamination does exist

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The potential does exist in the event of spillage.

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The potential does exist

01 ☒ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Workers on site have the potential to contact contaminants

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Unknown



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NC 000 R31 065

II. HAZARDOUS CONDITIONS AND INCIDENTS (continued)

01 ☒ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

Damage to flora does have a potential of occurring

01 ☒ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (INCLUDE NUMBER(S) OF SPECIES)

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

Potential damage to the fauna possible.

01 ☒ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

Potential to the food chain of the fauna.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
Spills, Runoff, Stripping, Leaking, Leaking Drums

02 ☐ OBSERVED (DATE: 4-26-90) ☒ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

Drums of caustic substance leaking, staining on floors, possible leaks/spills in past

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: 4-26-90) ☐ POTENTIAL ☐ ALLEGED

Unlikely potential

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

Facility does discharge to POTW after treating to pH

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

unknown

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

Drums awaiting shipment were in an area without an adequate berm

III. TOTAL POPULATION POTENTIALLY AFFECTED: 5000

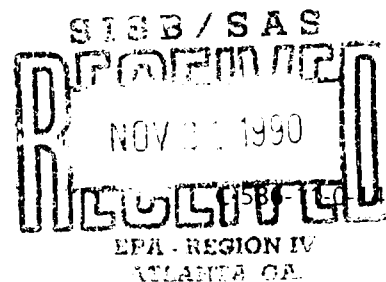
IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references to site files, sample analysis, reports)

EPA-NUS-State Files



1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710



November 20, 1990

Ms. Pat DeRosa
Superfund Section
North Carolina Department of Environment, Health, and
Natural Resources
P.O. Box 27687
Raleigh, North Carolina 27611-7687

Subject: Scheduled FIT Reconnaissance in North Carolina

Dear Ms. DeRosa:

The EPA Field Investigation Team (FIT) will be visiting the state of North Carolina on December 17-18, 1990. FIT will be conducting an offsite reconnaissance and gathering information to investigate the following site:

Photo Chemical Systems - Wendell
Wendell, Wake County, North Carolina
EPA ID No. NCD000831065

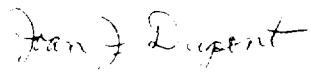
The FIT Project Manager is Andy Harvey.

This EPA identification number has also been used for the Photo Chemical Systems facility in Knightdale, Wake County. According to Robert Morris, the Knightdale facility is supposed to be assigned a new identification number soon.

Please notify the appropriate local agencies. I appreciate your help in this matter.

Very truly yours,

Approved:


Joan J. Dupont
North Carolina Section Manager



JJD/jec

cc: Robert Morris
Andy Harvey



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4WD-WPB

DATE: 10/17/90

Mr. Phil Blackwell
NUS Corporation
1927 Lakeside Parkway
Tucker, Georgia 30084

Dear Mr. Blackwell:

This letter concerns the proposed/completed FIT report on the following CERCLA site:

Site Name: Photo Chemical Systems, Inc. - Wendell
Site I.D.#: NCD 000831065
Site Reference#: 2585
EPA Project Manager: Morris

The above site has been assessed by EPA and a disposition made on it. Therefore, it has now been assigned to FIT for the following action:

 NFRAP

 PA

 SSI Phase I (PAR) -

 SSI Phase II

 LSI Evaluation

 LSI

 Other

Former location of EPI site, do a PAR on this site (it already has a PA). FIT has the file info. on this site & has done a "drive-by" of the property. Have the same person who did the work for the EPI do the PAR (if possible).

Sincerely,

Susan M. Deihl, Chief
North Unit
Site Assessment Section

cc: Fran Harrell

Acknowledging receipt of assignment

Philip M. Mohr Date 10/19/90



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4WD-WPB

DATE: 10/17/90

Mr. Phil Blackwell
NUS Corporation
1927 Lakeside Parkway
Tucker, Georgia 30084

Dear Mr. Blackwell:

This letter concerns the proposed/completed FIT report on the following CERCLA site:

Site Name: Photo Chemical Systems Inc. - Knightdale
Site I.D.#: TBA
Site Reference#: TBA
EPA Project Manager: Morris

The above site has been assessed by EPA and a disposition made on it. Therefore, it has now been assigned to FIT for the following action:

☐ NFRAP
☐ PA
☐ SSI Phase I (PAR)
☐ SSI Phase II
☐ LSI Evaluation
☐ LSI
☒ Other - EPS

Sincerely,

Susan M. Deihl

Susan M. Deihl, Chief
North Unit
Site Assessment Section

cc: Fran Harrell

This is the new location of
the Photo Chem. facility. FIT
already performed on-site
recon: 3/26/90

Acknowledging receipt of assignment

Phil Blackwell Date 10/19/90

THE FOLLOWING SITES ARE RCRA FACILITIES (THEREFORE, CERCLA NFRAP'S) AS OF AUGUST 21, 1989:

REF. NO.	ID NO.	SITE NAME
2782	NCD049773245	DETREX CHEMICAL INDUSTRIES INC
2772	NCD047369046	DUPONT, EI DE NUMOURS & CO. CAPE FEAR
2622	NCD003173358	DURABLE WOOD PRESERVERS INC
3155	NCD991278524	ENVIRONMENTAL RECYCLING CO.
2732	NCD041043811	FIBER INDUSTRIES INC
2597	NCD003149292	GASTON CO DYEING MACHINE CO
2787	NCD050409150	GENL ELEC CO
2876	NCD072018252	GENL ELEC MED STEAM TURBINE PROD DEPT
2724	NCD024900987	HOLCOMB CREOSOTE CO
2550	NCD000771964	LITHIUM CORP OF AMERICA CHEMICAL PLT
2927	NCD085438810	MILLER BREWING CO
3147	NCD991277856	NDA PESTICIDE LAB STORAGE FACILITY
2556	NCD000773655	OLDOVER CORP
2585	NCD000831065	PHOTO CHEMICAL SYSTEMS INC
2741	NCD042091975	RJR TECH CO
2895	NCD079060059	SAFETY KLEEN CORP
2559	NCD000776740	SAFETY - KLEEN 3-171-01
2892	NCD077840148	SAFETY - KLEEN CORP 3-064-01
2558	NCD000776732	SAFETY - KLEEN CORP. 3-031-02
2916	NCD083673681	SINGER CO - KERAFOIT DIV
2875	NCD072012354	SINGER CO. FURNITURE DIV. WASHINGTON
2939	NCD091249417	TEXTRON INC HOMELITE DIV
2627	NCD003184520	WEST POINT PEPPERELL HAMILTON
2654	NCD003213907	WESTERN ELEC CO INC LEX RD PLT

THE FOLLOWING SITES ARE ALSO LISTED AS NFRAP SITES (AS PER POS' FILE REVIEW OF AUGUST 21, 1989):

REF. NO.	ID NO.	SITE NAME
3041	NCD980557946	FAIRVIEW LDFL
2675	NCD003230083	FANCOURT W F CO
2567	NCD000813683	GA-PACIFIC CORP CHIP-N-SAW
2964	NCD097724306	GA-PACIFIC CORP CHIP-N-SAW
2565	NCD000813659	GA-PACIFIC CORP COMPLY
3060	NCD980559967	GA-PACIFIC CORP HDWD SAW
2562	NCD000813543	GA-PACIFIC CORP PANELBOARD
2566	NCD000813667	GA-PACIFIC CORP PLYWOOD
2669	NCD003225620	HIGH POINT FURNITURE INDUSTRIES
2573	NCD000828244	KINGS MOUNTAIN PILOT CREEK WWTP
2956	NCD095119210	MCGRAW EDISON CO
3054	NCD980559330	NASH CO LDFL
3055	NCD980559348	NASH CO LDFL
3056	NCD980559355	NASH CO LDFL
2533	NCD000616466	REYNOLDS RJ TOBACCO CO
2867	NCD071561864	SHERWIN WILLIAMS CO
3057	NCD980559389	TARBORO LDFL
3153	NCD991278300	UNITED DRUM T/A RELIANCE UNIVERSAL
3146	NCD991277807	WOOLFOLK CHEM WRKS WENDELL WHS

SSI PHASE II DOCUMENTATION CHECKLIST

Record this information in as much detail as you can, providing attachments (e.g. well logs, blue prints) as necessary. This information is required for all Screening Site Inspections and should be recorded in field logbooks by the project manager or his designee. Cite the source for all information obtained for all sections. Lists of HRS-specific definitions, sensitive environment identifications, and a well survey form are attached.

Site Name: *Photo Chemical Systems*

City, County, State: *Knightdale, Wake, North Carolina*

EPA ID No: *NCD 000831065*

Person responsible for documentation: *Jerald Tittle*

Date: *9.27.90*

ONSITE DATA COLLECTION

I. Site Layout

- Is the site active? If so, how many full time workers are employed?
YES, approximately 40
- Provide a site sketch to scale. Include in the sketch the following features if present:
 - buildings *see report*
 - paved areas
 - fences and security points
 - railroad tracks
 - source location and size (a source is defined as any area where a hazardous substance has been deposited, stored, disposed, or placed, or soil that has become contaminated due to migration)
 - drainage/diversion structures (describe)
 - storage areas (describe)
- Describe (and sketch) the probable overland flow direction of runoff from source area(s), and the approximate distance to perennial surface water (including wetlands). Consult the topo for this information and confirm while onsite.
See Report

- Complete well survey forms for industrial and/or potable wells on site, focusing on location (include in site sketch), depths, pumpage, and the number of workers served by each well. **NO WELLS ON SITE**

II. Waste and Containment Description

- Were the wastes initially deposited in a liquid, sludge, or dry state?
liquid waste
- Is the depth of wastes (bls) known? Is there waste or contaminated soil at 2 feet bls or higher? **NO, NO**
- Is there an engineered liner and/or cover (other than clay)? Is the liner single or double?
NO, NO
- Is there a soil cover? If so, is it native soil? How thick (in inches) is it? Describe the soil type and the extent of vegetation on a source and onsite.
NO, NO, does not apply
- How much waste is present in each source? Can describe by amount deposited, or volume of source, or area of source.
NA
- Are berms present? Are they maintained? How much freeboard is present?
Around chemical/mixing room. Approximately 3-4" Freeboard
- Is there any evidence of overflow, leaking, etc. in source and/or storage area(s)?
Evidence of past leakage.
- Is there a leachate collection system?
NO

SITE AND AREA USE DATA COLLECTION

- Identify the nearest residence or regularly occupied building. Specify whether the residence/building is on a source, contiguous to a source, or nearby.

See topographic map appendix A

- Are workers likely to come into contact with the source area(s)? (i.e. are work areas on or contiguous to a source?). *yes*

- Is the source area accessible and attractive to the public? Are there any signs of recreation in source area(s)? Describe. *NO, NO*

- Confirm the location of the nearest drinking water well if not onsite. *≈ 2000 feet North eas, see top.*

If any target information from the Recon Documentation Checklist is lacking or needs to be updated, this data must be obtained or confirmed during the SSI Phase II.

Definitions

- * **Karst Terrain:** a type of topography formed in limestone, dolomite, or gypsum by dissolution by rain and groundwater, resulting in a high potential for contaminants to migrate rapidly through the karst aquifer with little reduction in the concentration of the hazardous substance through dispersion, dilution, or attenuation. Karst formations are characterized by the primary movement of water occurring through solution channels.

Confining layer (aquiclude): a unit characterized by low permeability that prohibits movement of water or hazardous substances. The confining unit may be overlying or underlying an aquifer (definition modified from EPA Ground Water handbook). For scoring purposes, the confining unit must be areally continuous throughout the 2-mile site radius.

- * **Aquifer interconnections** (hydraulic interconnections): Areas between aquifers that allow the transfer of groundwater or hazardous substances in sufficient amounts resulting in the separate aquifers being treated as a single hydrologic unit. (Interconnections must be within 2 miles of the site).

Blended water system: any public water system which mixes or blends water from multiple groundwater wells and/or surface water intakes prior to or during distribution

- * **Designated recreational areas** (on the surface water pathway): any land contiguous with any portion of the surface water pathway designated by the state or community for public recreation. Recreational areas include designated swimming beaches, public recreation piers, marinas, waterfront parks and campgrounds, and designated water-sport recreation areas.

- * **Barriers to travel:** natural barriers (e.g. rivers) which would inhibit overland travel to the site or cause the overland travel distance to exceed 1 mile (i.e. the travel distance would have to be measured from an individual to the nearest crossing and from there to the site).

Perennial surface water: continuous and uninterrupted surface water persisting during all seasons of the year.

Contiguous: being in actual contact with a boundary or at a point.

- * taken from the November 28, 1988 revised HRS Proposed Rule

TABLE 4-23
SENSITIVE ENVIRONMENTS RATING VALUES

Sensitive Environment	Assigned Value
Critical habitat for Federal designated endangered or threatened species	100
Marine Sanctuary	
National park	
Designated Federal Wilderness Area	
Areas identified under the Coastal Zone Management Act ¹	
Sensitive areas identified under the National Estuary Program or Near Coastal Waters Program ²	
Critical areas identified under the Clean Lakes Program ³	
National Monument ⁴	
National Seashore Recreational Area	
National Lakeshore Recreational Area	
Habitat known to be used by Federal designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of the Coastal Barrier Resources System	
Coastal Barrier (undeveloped)	
Federal land designated for protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical ⁵ for the maintenance of a fish/shellfish species within a river system, coastal embayment, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species within a river system ⁶	
Terrestrial areas utilized by large or dense aggregations of animals for breeding ⁷	
National river reach designed as recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
State designated areas for the protection or maintenance of aquatic life (coastal, estuarine, or freshwater area) ⁸	
Coastal Barrier (partially developed)	
Federal designated Scenic or Wild River	

TABLE 4-23 (concluded)

Sensitive Environment	Assigned Value
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

¹Areas identified in State coastal Zone Management plans as requiring protection because of their ecological value.

²National Estuary Program study areas (subareas within estuaries) that are identified in Comprehensive Conservation and Management Plans as requiring protection because they support critical life stages of key estuarine species (Section 320 of Clean Water Act as amended).
Near Coastal Waters (NCW) as defined in Sections 104(b)(3), 304(1), 319, and 320 of Clean Water Act as amended.

³Clean Lakes Program critical areas (subareas within lakes, or in some cases entire small lakes) that are identified by State Clean Lake Plans as critical habitat (Section 314 of the Clean Water Act as amended).

⁴Use only for air pathway.

⁵Limit to areas described as being used for intense or concentrated spawning by a given species.

⁶Include only those river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time.

⁷Limit to terrestrial vertebrate species with aquatic or semi-aquatic foraging habits.

⁸Areas designated under Section 305(a) of the Clean Water Act as amended.

WATER USE SURVEY



1927 LAKESIDE PARKWAY
SUITE 814
TUCKER, GEORGIA 30084
404-938-7710

Name and address of resident

Harold Poole
Box 489
Knightdale, NC.
(919) 266-3646

Check water source(s) used by resident

1. DRILLED WELL ☒ DEPTH 130' WATER LEVEL
2. DUG WELL ☐ DEPTH WATER LEVEL
3. SPRING ☐ ARTESIAN ☐ GRAVITY ☐
4. SURFACE WATER ☐
5. PUBLIC SUPPLY ☐
6. OTHER ☐

Check water use(s) and specify water source of each

DRINKING ☒ NUMBER OF USERS 6 SOURCE
HOUSEHOLD ☐ NUMBER OF USERS SOURCE
IRRIGATION ☐ ACRES CROP SOURCE
OTHER ☐

ANY PROBLEMS WITH WATER? NO

HOW LONG HAVE SOURCES BEEN IN USE? 1978 ->

ANY MONITORING WELLS ON PROPERTY? NO

PREPARED BY Terold Title DATE 9-27-80

COMMENTS

4WD-WPB

MEMORANDUM

DATE:

SUBJECT: File Review of North Carolina CERCLA Site Assessment Files

FROM: Robert Morris *RM*
North Unit, Site Assessment Section
Waste Program Branch

TO: Site File
Photo Chemical Systems, Inc.
NCD000831065

As a result of the CERCLA file review on the State of North Carolina Site Assessment Files completed on 08/21/89, and through subsequent consultation with North Carolina Department of Environment Health and Natural Resources personnel, it was determined that Photo Chemical Systems, Inc., NCD000831065, was a RCRA TSD facility. Because of the RCRA status of this site, no further remedial action is currently planned under CERCLA authorities.

cc: Pat DeRosa, NCDEHNR

Document Name: RCRA TSD Page 6

4WD-WPB

MEMORANDUM

DATE: 7/9/90

SUBJECT: File Review of North Carolina CERCLA Site Assessment Files

FROM: Robert Morris
North Unit, Site Assessment Section
Waste Program Branch

TO: Site File
Photo Chemical Systems, Inc.
NCD000831065

As a result of the CERCLA file review on the State of North Carolina Site Assessment Files completed on 08/21/89, and through subsequent consultation with North Carolina Department of Environment Health and Natural Resources personnel, it was determined that **Photo Chemical Systems, Inc.**, NCD000831065, was a RCRA TSD facility. Because of the RCRA status of this site, no further remedial action is currently planned under CERCLA authorities.

cc: Pat DeRosa, NCDEHNR

Document Name: RCRA TSD Page 6

4WD-WPB

MEMORANDUM

DATE: 7/9/90

SUBJECT: File Review of North Carolina CERCLA Site Assessment Files

FROM: Susan Deihl, Chief
North Unit, Site Assessment Section
Waste Program Branch

TO: Syed Ahmed, Acting Chief
Waste Engineering Section (NC/SC)
RCRA and Federal Facilities Branch

This is to inform you that as a result of the CERCLA file review on the State of North Carolina Site Assessment Files completed on 8/21/89, and through subsequent consultation with North Carolina Department of Environment Health and Natural Resources personnel, it was determined that **Photo Chemical Systems, Inc., NCD000831065**, was a RCRA TSD facility. Because of the RCRA status of this site, no further remedial action is currently planned under CERCLA authorities.

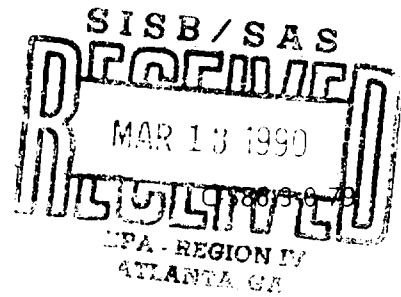
However, if you determine that the RCRA status of this site has changed, or if the RCRA responsible party is unwilling or unable to pay for necessary corrective action, please inform us and we will reactivate our investigation of the site.

cc: Pat Rosa, NCDEHNR
Site File

Document Name: RCRA TSD Page 5



1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710



March 7, 1990

Mr. A. R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Site Access Letter
Environmental Priorities Initiative Program
Photo Chemicals System, Inc.
Knightdale, Wake County, North Carolina
TDD No. F4-8910-29

Dear Mr. Hanke:

Please find enclosed a completed site access letter (verbal approval) for the above subject site. The visual site inspection is scheduled for March 26, 27, 1990.

If you have any questions or comments relative to the access form or site scheduled site inspection, please contact me.

Very truly yours,

A handwritten signature in cursive script that reads "Jerald Tittle".

Jerald Tittle
Project Manager

Approved:

A handwritten signature in cursive script that reads "Bob Deihl".

JT/ma

Enclosure

CC: Susan Deihl EPA

4WD-SISB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Name and address:

MR. PRESTON AVERETTE
PHOTO CHEMICAL SYSTEMS, INC
105 FOREST DRIVE

KNIGHTDALE, NC 27545

RE: PHOTO CHEMICALS SYSTEMS INC
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
NCD 000 831 065

Dear Mr. AVERETTE:

The United States Environmental Protection Agency (EPA), pursuant to the authority and requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499 and Section 3007 of the Resource Conservation and Recovery Act (RCRA), is planning to conduct an investigation of the above referenced site. PHOTO CHEMICAL SYSTEMS is located on/at FOREST DRIVE. EPA has reason to believe that there may be a release or threat of a release of hazardous substances from the site into the surrounding environment. The purpose of this investigation is to determine, as stated in CERCLA (104)(e)(2)(A), the identification, nature, and quantity of materials which have been or are generated, treated, stored or disposed of at a vessel or facility or transported to a vessel or facility.

As per the telephone conversation on MARCH 6, 1990 with PRESTON, AVERETTE, EPA was granted permission for access to your property beginning on or about MARCH 26, 1990, and continuing through the completion of the investigation on or about MARCH 27, 1990. Activities to be conducted during the investigation may include:

1. Inspect, sketch, and photograph the premises;
2. Review records of Solid Waste Management Units (SWMUs) which provide for;
 - (i) The location of the unit(s) on the topographic map.
 - (ii) Designation of type of unit(s).
 - (iii) General dimensions and structural description (supply any available drawings).

- (iv) When the unit was operated.
 - (v) Specification of all wastes that have been managed at the unit to the extent available.
3. Review of any records of releases of hazardous waste or hazardous constituents from such units.
 4. Review records on the size and type of facility, and the manufacturing process to determine past waste handling practices.

The above activities will be conducted by personnel from EPA Region IV's Field Investigation Team (FIT). JERALD TITTLE of FIT will contact you prior to the actual site visit to make final arrangements and note any changes.

If you have any questions, please contact ROBERT MORRIS at (404) 347-5065.

Your cooperation in this matter is appreciated.

Sincerely,

~~Denise Bland~~ ROBERT MORRIS
Environmental Specialist ENGINEER

cc: JERALD TITTLE N.B. FIT 4
JEFF CRAIN EPA RCRA

bc: John Dickerson, EPA RCRA

July 6, 1984

TO: File

FROM: Frank Moore *FM*

SUBJECT: Telephone Interview with Mr. Finch with
Photo Chemical Systems, Inc.

The following information was obtained from
Mr. Ken Finch with Photo Chemical Systems, Inc. on
7-6-84 to be used in completing the PA.

Old Address: 11 N. Pine Street
Wendell, N. C. 27591

Present Address: 515 W. Wilson Avenue
Wendell, N. C. 27591

Future Address: (as of September 84)
Knightdale, N. C.

The company started in the area around 1976 and was
operated out of the salesman's home. The first location
with inventory was at 11 N. Pine Street, and was there
approximately 1 1/2 years. They have occupied their
current facility (515 W. Wilson Avenue) for the past 2 1/2
years. In September of this year they plan to move into
their new facility in Knightdale.

Mr. Finch stated that up until a few years ago they
only sold chemicals and were not involved with the trans-
portation, storage or generation of hazardous wastes.

The "Part A" was submitted while they were at the
Pine Street location, but they were still not handling
hazardous wastes generated by their customers.

Mr. Finch stated that they have never disposed of any
hazardous wastes except to SCA in S. C., with correct permits.
No chemicals (product or wastes) had even been spilled, and
none were left at the Pine Street facility when they moved
and the facility is presently occupied by another company. *

Other Information

- Photo Chemical Systems, Inc.
- Owner, Jeff Dykes
- furnishes chemicals for plating and finishing
of printed circuit boards

- Surface Chemistry, Inc.
(sub of Photo Chemical Systems)
- In house custom blending/mixing of chemicals for customer use (same facility)
- PCS Transportation, Inc.
(Sub of Photo Chemical Systems)
- Company name used in transporting and disposing of hazardous wastes generated by its customers.

Presently in RCRA as a transporter, the company (as a service to its customers) removes the wastes from the chemicals they supply their customers. This hazardous waste is disposed of at SCA in South Carolina.

*Not a CERCLA Site
Present location inspected by L. Perry, WMS
in May 84 (RCRA)*

PRELIMINARY ASSESSMENT CHECKLIST (revised 6/30/84)

SITE ID NC000831065 STATE NC RECOMMENDATION : ☒ No Further Action ☐ Further Investigation (To be completed by: _____) ☐ Emergency/Remedial (Referred to _____) ☐ Other

SITE NAME Waste Chemical Systems ☒ RCRA Facility

Checklist Reviewer (name & date) W. J. 8/24/84 ☒ Contact (name & phone) _____ More information needed

☒ Site Location Adequate ☒ Type & Amount of Hazardous Waste _____ (Surface water name, population)

☒ File Search Completed ☒ Responsible Party (address & phone) _____ Accepted for entering into ERRIS

☐ Rejected (State Reason _____)

CIRCLE THE ITEM(S) PROVIDED, OR CIRCLE THE HEADING NUMBER IF DATA IS MISSING.

1. TYPE OF OWNERSHIP	2. OWNER NOTIFICATION	3. ON SITE INSPECTION	4. SITE STATUS	5. PHYSICAL STATES	6. WASTE QUANTITY AT SITE
<input checked="" type="radio"/> P-PRIVATE	<input checked="" type="radio"/> RCRA 3001	E-EPA	A-ACTIVE	S-SOLID	* T-TONS
F-FEDERAL	C-CERCLA	C-EPA CONTRACTOR	I-INACTIVE	P-POWDER, FINES	* Y-CUBIC YARDS
S-STATE	(UNCONTROLLED WASTE SITES)	S-STATE	U-UNKNOWN	U-SLUDGE	* D-DRUMS (NUM)
C-COUNTY	N-NONE	H-OTHER CONTRACTOR		R-SLURRY	* X-MULTIPLE
M-MUNICIPAL		L-LOCAL HEALTH OFF		L-LIQUID	
O-OTHER		O-OTHER		G-GAS	
U-UNKNOWN		* X-MULTIPLE		O-OTHER	
			* X-MULTIPLE		

7. WASTE CHARACTERISTICS	8. WASTE TYPE	9. HAZARDOUS CONDITIONS	10. RANKING
T-TOXIC	S-SLUDGE	G-GROUNDWATER CONTAMINATION	N-NATIONAL PRIORITY LIST
C-CORROSIVE	O-OILY WASTE	S-SURFACE WATER CONTAMINATION	M-MITRE RANKING
R-RADIOACTIVE	L-SOLVENTS	A-CONTAMINATION OF AIR	O-OTHER
P-PERSISTENT	P-PESTICIDES	F-FIRE/EXPLOSIVE CONDITIONS	* X-MULTIPLE
S-SOLUBLE	G-ORGANICS	D-DIRECT CONTACT	
I-INFECTIOUS	A-ACIDS	L-CONTAMINATION OF SOIL	
F-FLAMMABLE	B-BASES	W-DRINKING WATER CONTAMINATION	
G-IGNITABLE	M-HEAVY METALS	I-WORKER EXPOSURE/INJURY	M-DAMAGE TO OFFSITE PROPERTY
V-VOLATILE	* X-MULTIPLE	P-POPULATION EXPOSURE/INJURY	-CONTAMINATION OF SEWERS, STORM DR
E-EXPLOSIVE		R-DAMAGE TO FLORA	E-ILLEGAL/UNAUTHORIZED DUMPING
A-REACTIVE	* REQUIRES ENTRY	K-DAMAGE TO FLAUNA	O-OTHER KNOWN, POTENTIAL, OR ALLEGE
M-INCOMPATIBLE	UNDER "DESCRIPTION"	H-CONTAMINATION OF FOOD CHAIN	* X-MULTIPLE
<input checked="" type="radio"/> O-OTHER	e.g. D6 & X7 - 50 Drums	T-UNSTABLE CONTAINMENT OF WASTES	
<input checked="" type="radio"/> NOT APPLICABLE	of volatile organics and		
* X-MULTIPLE	20 tons of corrosive sludge		
	D9 Contaminated ground and		
	surface water and soil.		

PRELIMINARY INSPECTION CHECKLIST (revised 6/30/84)

Check each item if complete - leave blank if incomplete or inadequate data provided.

Site Name and Location

☒ Site Name
☒ Specific Location
 (include street number)
☒ City, State, Zip Code
☒ County, County Code
☒ Congressional District
☐ Coordinates
☒ Directions to site

Responsible Parties

☒ Owner
☒ Owner address and telephone
☒ Operator (indicate if same as owner)
☒ Operator address and telephone
☒ Type of ownership
☒ Owner/Operator notification
☒ Person to Contact (phone)

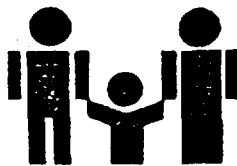
Characterization of Potential Hazard

☒ Site Inspection
☒ Site Status
☒ Substances on site
 (Known or alleged)
☒ Potential Hazard Description
 (include relative population and
 water body in vicinity)
☒ Priority Assessment *(None)*
☐ Years of Operation
☒ Other (Describe below)

NOT A CERCLA SITE
No Further Action Required

Description of Hazardous Conditions, etc.

☐ Surface Water Name (river, lake, stream)
☐ Potential Population (town, population)
☐ Pertinent Hydrogeologic Information
 (aquifer recharge area, significant
 geologic structures in vicinity)
☒ Type of Hazardous Waste } *None*
☒ Amount of Hazardous Waste }
☐ Concentration of Hazardous Substances *NA*
☐ Measure of concentration *NA*
☒ Source and Date of Reports Cited



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Date: May 30, 1984

Mr. Jeff Dykes
Photo-Chemical Systems, Inc.
515 W. Wilson Avenue
Wendell, NC 27591

Re: Facility ID No. NCD 000 831 065

Dear Mr. Dykes:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

<u>Add As</u>	<u>Delete As</u>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	generator
<input type="checkbox"/>	<input type="checkbox"/>	transporter
<input type="checkbox"/>	<input type="checkbox"/>	treater
<input type="checkbox"/>	<input type="checkbox"/>	storer
<input type="checkbox"/>	<input type="checkbox"/>	disposer
<input checked="" type="checkbox"/>	<input type="checkbox"/>	small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is ☐ is not ☒ being cancelled.

Cordially,

O. W. Strickland, Jr.
O. W. Strickland, Head

Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS /KL: tl

cc: Doug McCurry
EPA Region IV
Emil Breckling
Larry Perry
Wake County Health Department

DHS Form 3048 3/82
Solid & Haz. Waste Mgt. Branch

Department of Human Resources
Division of Health Services
Solid & Hazardous Waste Management Branch

APPLICATION FOR CHANGE IN CLASSIFICATION UNDER RCRA

Date: 5-25-84

Company Name: Photo-Chemical Systems, Inc.

Company Address: 515 W. Wilson Ave, Wendell, N.C. 27591

EPA ID No: NCD 000 831 065

Mr. O. W. Strickland, Head
Solid & Hazardous Waste Management Branch
Division of Health Services
P. O. Box 2091
Raleigh, N. C. 27602

Dear Mr. Strickland:

Our company requests the following change in its classification under RCRA (check all that apply):

Add As

Delete As

☐☒

generator

☐☐

transporter

☐☐

treater

☐☐

storer

☐☐

disposer

☒☐

small generator

Our reason for this request is:

Site does not generate hazardous waste

NOTE: Give any pertinent information. This may be a change in your process, a new calculation of the volume of your waste, new analyses of your waste, etc. Be specific. Please note that this is not a petition for delisting a listed waste, which requires totally different handling.

If your request takes you out of the regulated system, but you wish to retain your EPA ID No., please state why.

Facility desires to retain its I.D. number as they are still a hazardous waste transporter and they might possibly be considered waste generators in the future.

(over)

I understand that my company must supply information about any changes in its operations which might change its status again on its own initiative.

I certify that the information supplied is accurate and correct to the best of my knowledge and belief. I am authorized to make this request on behalf of my company at the location given.

Signature:

Kenneth R. Litch

Company Title:

Warehouse Manager

SPEED LETTER

TO MR. KEITH LAWSON
SOLID AND HAZARDOUS WASTE MANAGEMENT
DIVISION OF HEALTH SERVICES
P.O. BOX 2091
RALEIGH, NORTH CAROLINA 27602



PHOTO CHEMICAL SYSTEMS, INC.

900 Sun Valley Drive Roswell, Ga. 30076 (404) 993-1718

SUBJECT PART B APPLICATION AS A TSD FACILITY

MESSAGE

DATE 12/8/83 19__

PHOTO CHEMICAL SYSTEMS, WENDELL, NORTH CAROLINA DOES NOT WISH TO FILE THE PART B
APPLICATION FOR PERMANENT AUTHORITY TO ACT AS A TSD FACILITY. AT THIS TIME, WE
FEEL THIS WOULD NOT BE ADVANTAGEOUS TO OUR SITUATION. HOWEVER, THANK YOU FOR
YOUR CONSIDERATION AND COOPERATION FOR PAST HELP AND INFORMATION.

SIGNED 

REPLY

DATE _____ 19__

SIGNED _____

PHOTO CHEMICAL SYSTEMS, INC.



November 16, 1983

Mr. Keith Lawson
Solid and Hazardous Waste Management
P.O. Box 2091
Raleigh, N.C.

Dear Mr. Lawson,

In response to Mr. Strickland's letter of November 2nd, we would like to confirm that we no longer handle hazardous waste and therefore do not wish to submit a part B application.

Sincerely,



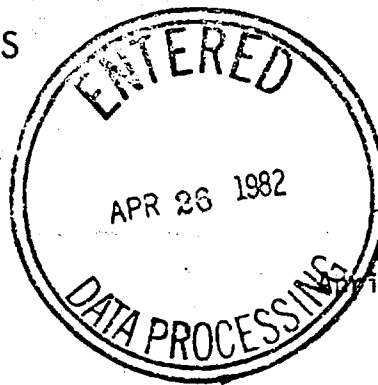
Jeff Dykes
President
Photo Chemical Systems

JD/bd



Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091



APR 19, 1982

MEMORANDUM

TO: O. W. Strickland, Head
Solid & Hazardous Waste Management Branch

FROM: Larry D. Perry, District Representative *LDP*
Solid & Hazardous Waste Management Branch

SUBJECT: Interim Status Inspection - TSDF, Transporter
Photo Chemical Systems
P. O. Box 826
Wendell, NC 27591 (Wake County)
EPA I.D. #NCD000831065
Contact: Preston Averette, Plant Manager

only transporter

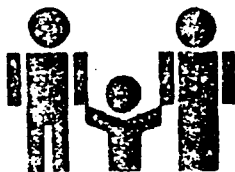
Small then

On March 30, 1982, an interim status inspection was made on the Photo Chem facility in order to determine compliance with RCRA regulations. During the inspection, it was determined that the facility does not generate any waste and listed as a storage facility due to speculation that it might store waste, for an interim period, in the future. This waste was anticipated from their customer pick-up that would be later transported to a disposal facility. At present, no material is being transported or stored by Photo Chemical Systems.

After consultation with the management it was determined that the facility would delist as a TSDF facility but retain their transporter status and ID number. At present they are considered a non-complying transporter but once they begin to transport hazardous waste they understand that they must be in compliance with all applicable transporter and DOT regulations. The facility also is aware that they can store waste at their facility for only 10 days prior to moving the material or being in violation of RCRA storage regulations.

A letter requesting to delist will be forwarded to this office by Mr. Averette.

LDP:ns



DIVISION OF HEALTH SERVICES
P.O. Box 2091
Raleigh, N.C. 27602-2091

Ronald H. Levine, M.D., M.P.H.
STATE HEALTH DIRECTOR

[Handwritten signature]

Date: April 7, 1982

Mr. Preston Averette
Photo Chemical Systems, Inc.
P.O. Box 580
Wendell, NC 27591

Re: Facility ID No. NCD000831065

Dear Mr. Averette:

Based on information supplied by you we have processed and accepted at the State level your request for the facility identified with the above ID number to receive the indicated change in classification under RCRA:

<u>Add As</u>	<u>Delete As</u>	
<input type="checkbox"/>	<input type="checkbox"/>	generator
<input type="checkbox"/>	<input type="checkbox"/>	transporter
<input type="checkbox"/>	<input type="checkbox"/>	treater
<input type="checkbox"/>	<input checked="" type="checkbox"/>	storer
<input type="checkbox"/>	<input type="checkbox"/>	disposer
<input type="checkbox"/>	<input type="checkbox"/>	small generator

We are advising EPA of the change in your status. Please notify us if there is any further change in your operations which would again affect your status. Your EPA ID NO. is ☐ is not ☒ being cancelled.

Cordially,

[Handwritten signature]
O. W. Strickland, Head

Solid & Hazardous Waste Management Branch
Environmental Health Section

OWS

cc: John Herrmann
EPA Region IV
Emil Breckling

DHS Form 3048 3/82
Solid & Haz. Waste Mgt. Branch

PHOTO CHEMICAL SYSTEMS, INC.



March 31, 1982

O. W. Strickland
Division of Health Services
Solid and Hazardous Waste Management Branch
Environmental Health Section
P. O. Box 2091
Raleigh, NC 27602

Dear Mr. Strickland:

As follow-up to a visit with Larry Perry, I would like to request that Photo Chemical Systems, Inc. in Wendell, North Carolina be de-listed as a TSD facility (storage). However, we do wish to retain our transporter list reference number NCD000831065.

Your attention on this matter will be appreciated.

Sincerely,

Photo Chemical Systems, Inc.

Preston Averette

Preston Averette

PGA/rc

cc: Larry Perry

*Never were generator. Used to
store "spent" FeCl_3 containing
dissolved Cu. No longer do this.*

FOR OFFICIAL USE ONLY														
W														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1 F 0 0 1 23 - 26	2 F 0 0 2 23 - 26	3 F 0 0 3 23 - 26	4 F 0 0 5 23 - 26	5 F 0 0 6 23 - 26	6 F 0 0 7 23 - 26
7 F 0 0 8 23 - 26	8 F 0 0 9 23 - 26	9 23 - 26	10 23 - 26	11 23 - 26	12 23 - 26

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13 23 - 26	14 23 - 26	15 23 - 26	16 23 - 26	17 23 - 26	18 23 - 26
19 23 - 26	20 23 - 26	21 23 - 26	22 23 - 26	23 23 - 26	24 23 - 26
25 23 - 26	26 23 - 26	27 23 - 26	28 23 - 26	29 23 - 26	30 23 - 26

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31 23 - 26	32 23 - 26	33 23 - 26	34 23 - 26	35 23 - 26	36 23 - 26
37 23 - 26	38 23 - 26	39 23 - 26	40 23 - 26	41 23 - 26	42 23 - 26
43 23 - 26	44 23 - 26	45 23 - 26	46 23 - 26	47 23 - 26	48 23 - 26

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49 23 - 26	50 23 - 26	51 23 - 26	52 23 - 26	53 23 - 26	54 23 - 26
-------------------	-------------------	-------------------	-------------------	-------------------	-------------------

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☐ 1. IGNITABLE
(D001)

☒ 2. CORROSIVE
(D002)

☐ 3. REACTIVE
(D003)

☐ 4. TOXIC
(D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE 	NAME & OFFICIAL TITLE (type or print) President	DATE SIGNED 5/11/84
--------------------------------------------------------------------------------------------------	----------------------------------------------------	------------------------

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
<div style="text-align: center; font-size: 2em; font-weight: bold;">EPA</div> <div style="text-align: center; font-size: 1.5em; font-weight: bold;">Photo Chemical Systems</div> <div style="text-align: center; font-size: 1.2em;">P.O. Box 826</div> <div style="text-align: center; font-size: 1.2em;">Wendell, N.C. 27591</div> <div style="text-align: center; font-size: 1.2em;">E. Wilson Road</div> <div style="text-align: center; font-size: 1.2em;">Wendell, N.C. 27591</div>		<div style="border: 1px solid black; padding: 5px; font-weight: bold;">FNCDO0007310653D</div>			
		GENERAL INSTRUCTIONS			
		If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.			
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.					
SPECIFIC QUESTIONS		MARK 'X'		SPECIFIC QUESTIONS	
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		YES	NO	FORM ATTACHED	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		YES	NO	FORM ATTACHED	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		YES	NO	FORM ATTACHED	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		YES	NO	FORM ATTACHED	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		YES	NO	FORM ATTACHED	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		YES	NO	FORM ATTACHED	
D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		YES	NO	FORM ATTACHED	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		YES	NO	FORM ATTACHED	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		YES	NO	FORM ATTACHED	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		YES	NO	FORM ATTACHED	
III. NAME OF FACILITY					
<div style="border: 1px solid black; padding: 5px;"> <div style="display: flex; justify-content: space-between;"> 1 SKIP PHOTO CHEMICAL SYSTEMS INC </div> </div>					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)				B. PHONE (area code & no.)	
2 A. V. E. PRESTON				919 365 7906	
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
3 P.O. Box 826					
B. CITY OR TOWN				C. STATE	D. ZIP CODE
4 Wendell				NC	27591
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
5 E. Wilson Rd					
B. COUNTY NAME					
Wake					
C. CITY OR TOWN				D. STATE	E. ZIP CODE
6 Wendell				NC	27591
F. COUNTY CODE (if known)					

VNL OPERATOR INFORMATION

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)				D. PHONE (area code & no.)			
F - FEDERAL	M - PUBLIC (other than federal or state)	P (specify)	C	A	919	365	7906
S - STATE	O - OTHER (specify)						
P - PRIVATE							

F. CITY OR TOWN										G. STATE		H. ZIP CODE		IX. INDIAN LAND	
Wendell										NC		27591		Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

K. EXISTING ENVIRONMENTAL PERMITS												
A. NPDES (Discharges to Surface Water)						D. PSD (Air Emissions from Proposed Sources)						
E	T	I				E	T	I				
9	N					9	P					
15	16	17	18	19	20	15	16	17	18	19	20	
B. DIC (Underground Injection of Fluids)						E. OTHER (specify)						
E	T	I				E	T	I				
9	U					9						
15	16	17	18	19	20	15	16	17	18	19	20	
C. RCRA (Hazardous Wastes)						F. OTHER (specify)						
E	T	I				E	T	I				
9	R					9						
15	16	17	18	19	20	15	16	17	18	19	20	

XL MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

1. NATURE OF BUSINESS (provide a brief description)

Chemical Distributor for Printed Circuit Industry
Store spent Ferric Chloride

XIII. CERTIFICATION (see Instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
JEFF D. KES		11-17-80

COMMENTS FOR OFFICIAL USE ONLY

11

FORM 3 RCRA		U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION Consolidated Permits Program (This information is required under Section 3005 of RCRA.)	I. EPA I.D. NUMBER											
			F N C P 00083106531											

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

- ☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

- ☒ 2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION (place an "X" below and complete Item I above)

- ☐ 1. FACILITY HAS INTERIM STATUS

- ☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	
Storage:			Treatment:			
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY	
TANK	S02	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY	
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR	
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY	
Disposal:						
INJECTION WELL	D79	GALLONS OR LITERS				
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER				
LAND APPLICATION	D81	ACRES OR HECTARES				
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY				
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS				
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	
GALLONS	G	LITERS PER DAY	V		ACRE-FEET	A
LITERS	L	TONS PER HOUR	D		HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W		ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E		HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H			

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	S01	15,000	G		7				
2					8				
3					9				
4					10				

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR INCLUDING DESIGN CAPACITY.

CRIBING OTHER PROCESSES (code "T04"). EACH PROCESS ENTERED HERE

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE
POUNDS P
TONS T

METRIC UNIT OF MEASURE CODE
KILOGRAMS K
METRIC TONS M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

WASTE NO. LINE	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

EPA I.D. NUMBER (enter from page 1)										FOR OFFICIAL USE ONLY									
W N C D 0 0 0 0 9 3 1 0 6 5 3 1										W DUP 2 DUP									
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)										D. PROCESSES									
WASTE NO.	A. EPA HAZARD. WASTE NO. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE			C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))							
	21	22	23	24	25	26		27	28	29	30	31	32	33	34				
1	F	0	0	7	15,000		G	S	0	1									
2																			
3																			
4																			
5																			
6																			
7																			
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23																			
24																			
25																			
26																			

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)**E. USE THIS SPACE TO LIST ADDITIONAL PROC CODES FROM ITEM D(1) ON PAGE 3.**

EPA I.D. NO. (enter from page 1)

F	N	C	D	0	0	0	8	3	1	0	6	5	3	6
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

VIII. FACILITY OWNER
☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

☐ B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

E	Cotton, Fred, D, Kes, Jeff	919-345-2906
16	17	18

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

F	900 SUN VALLEY DR	G	ROSWELL GA	GA	30026
19	20	21	22	23	24

IX. OWNER CERTIFICATION

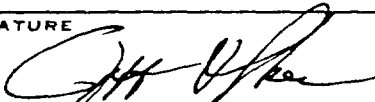
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

JEFF DUKES



11-17-80

X. OPERATOR CERTIFICATION

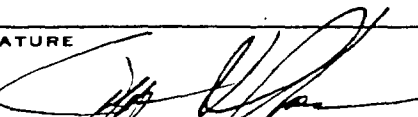
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

JEFF DUKES



11-17-80

V. FACILITY DRAWING (see page 4)

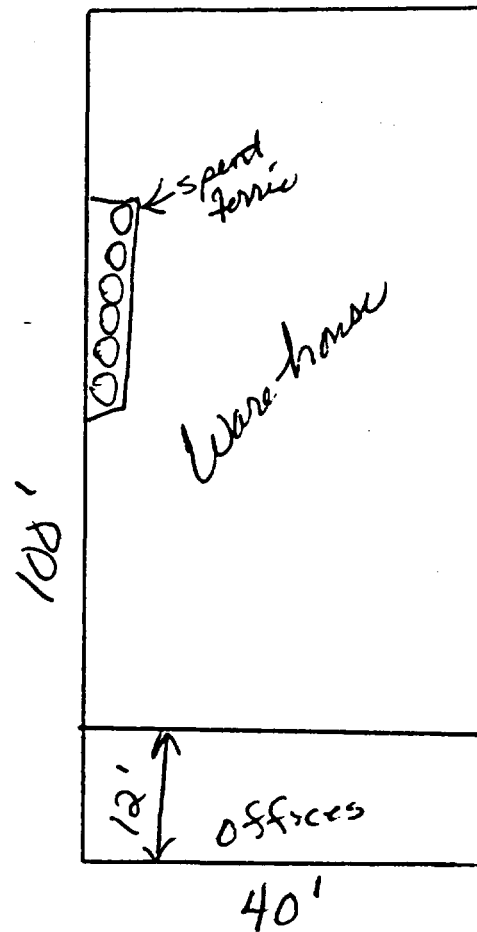


Photo Chemical Systems
P. Wilson St.
Wendell
N.C. 27591